

Institutions Holding Membership in the American Association of Colleges of Pharmacy

List of Delegates in Attendance at the 1933 Meeting

ALABAMA

Alabama Pharmaceutical Institute,
School of Chemistry and Pharmacy.

James C. Hulse, Dean; Professor
J. E. Hulse, Dean (1927).

University of Southern California,
College of Pharmacy, Los Angeles;
Dean (1928).

University of California, College of
Pharmacy, Los Angeles; Dean
(1928).

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University of California, College of
Pharmacy, Los Angeles; Dean
(1928).

tello; Eugene O. Leonard, Dean
(1927).

ILLINOIS

University of Illinois, College of
Pharmacy, Chicago; William H.
Day, Dean (1900).

(Clyde M. Snow, Edmund N. Gath-
ercoal, Hugh L. Davis, Sherman
W. Morrison, Ralph E. Terry, Law-
rence Templeton, Cliveden L. Cox,
Lewis E. Martin, Samuel Shkolnik,
R. K. Snyder.)

INDIANA

Indianapolis College of Pharmacy,
Indianapolis; Edward H. Niles,
Dean (1927).

(Edward M. Niles, Francis E.
Bibbins, LARRY F. Jones.)

Purdue University, School of Phar-
macy, Lafayette; Charles B. Jordan,
Dean (1901).

(Charles B. Jordan, Charles O.
Lee, Carl J. Klemm.)

University of Notre Dame, Depart-
ment of Pharmacy, Notre Dame;
Lawrence H. Baldinger, Director
(1907).

(Lawrence H. Baldinger.)

Valparaiso University, College of
Pharmacy, Valparaiso; Frederick
V. Lofgren, Dean (1922).

(Frederick V. Lofgren.)

IOWA

State University of Iowa, College
of Pharmacy, Iowa City, Wilber J.
Testers, Dean (1905).

(Wilber J. Testers, Zada M. Cooper,
Rudolph A. Kuwert, James W.
Jones, Louis G. Kopf.)

KANSAS

University of Kansas, School of
Pharmacy, Louisville; L. D. Haven-
hill, Dean (1900).

(L. D. Havenhill.)

KENTUCKY

Louisville College of Pharmacy,
Louisville; Gordon L. Curry, Dean
(1907).

(Gordon L. Curry.)

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Meeting, Dallas, Texas.

THE AMERICAN JOURNAL
- - OF - -
PHARMACEUTICAL EDUCATION

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Rabbe, Rudolph H.....	Ohio Northern University
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THEODORE JAMES BRADLEY
Scientist, Educator, Philanthropist.

THEODORE JAMES BRADLEY

On Friday, December 11th pharmacy and pharmaceutical education in particular were made immeasurably poorer by the death of our dear friend and highly respected colleague, Dean Theodore J. Bradley, President of the American Association of Colleges of Pharmacy.

Doctor Bradley had been actively engaged in some phase of pharmacy since early childhood, when he started his brilliant and fruitful career as an errand boy in a retail pharmacy in Albany, New York. As a result of his formal college training, obtained at the Albany College of Pharmacy and the Rensselaer Polytechnic Institute and his great fund of practical experience, he became familiar with every aspect of pharmacy. His unusual qualities and accomplishments placed a decided premium upon his services, and we find his influence being felt in all the various ramifications of the general field of pharmacy.

His pharmaceutical contacts and accomplishments were too numerous for us to attempt to enumerate even the more important of them. He was a Past President of the American Pharmaceutical Association, an organization which he served loyally and well.

During his deanship at the Massachusetts College of Pharmacy that institution was strengthened and improved in many ways. It is housed in a beautiful and commodious building. It contains one of the most complete and useful pharmaceutical libraries in the United States. Its scientific equipment and apparatus are modern and thoroughly ample for the work being undertaken. It is also one of our most heavily endowed Colleges of Pharmacy and will stand as a monument to the vision and ability of Theodore J. Bradley in the field of pharmaceutical education. He was a member of the Pharmaceutical Syllabus Committee, a representative of the American Association of Colleges of Pharmacy on the American Council of Pharmaceutical Education, and President of the American Association of Colleges of Pharmacy at the time of his death.

Among the more distinguishing characteristics of Dean Bradley were loyalty, sincerity, and profound honesty. Many have, of course, differed with him in their opinions, but none have ever doubted his honesty and his loyalty to his own convictions. Dean Bradley was never disposed to take the easy way out. He fought on tirelessly for that which he thought was right and best.

We shall miss him at our meetings and at the council tables in the years to come. We mourn his passing. We revere his memory. We are thankful for the opportunity of having been associated with him. We trust that, through us, the strong qualities of his personality and character may be handed on to the standard-bearers of the next generation and thus serve to perpetuate both the memory and influence of one concerning whom we might well say, "Well done, good and faithful servant."

Ernest Little.

Many are well aware of the scientific and educational achievements of President Bradley. His untiring labors in our Association, in other pharmaceutical organizations and in revision of the pharmacopoeia are matters of fact thoroughly appreciated by hundreds who attend national conventions and by many more who were privileged to be associated in any of this work. His intense and continuous efforts for betterment of the retail pharmacist and for raising standards of our graduates, which was probably his greatest professional interest, is a matter of public record and knowledge. He himself considered his work on percentage solutions his greatest contribution to pharmacy, but it is difficult to segregate that one point from the hundreds of other ways in which his immense efforts produced effects apparently equal in ultimate importance.

To those who knew him best, however, these intelligent labors in the cause of state and national pharmacy were only secondary. The great character and supremely high ideals of President Bradley were immensely more endearing and, after a close intimacy with the man, one could hardly fail to appreciate them and to feel thankful for the opportunity to gain moral and mental stimulation.

His early life in Albany, New York, gives some inkling of his character. Without the advantages of a well-to-do home, he secured work at fifteen in a local drug store at a time when working hours were almost synonymous with waking ones. He did find time to study and to matriculate in the Albany College of Pharmacy, from which he was graduated in 1895, in the meantime having passed the state examination for registration.

In the seventeen years that followed, Dean Bradley married and created and supported a home, and secured and successfully performed duties in three or four separate positions. In addition, he attended and graduated from the Rensselaer Polytechnic Institute with a baccalaureate degree and with election to Sigma Xi.

For the entire seventeen years he was a teacher in the Albany College of Pharmacy and an executive officer for most of the time. For practically this whole period he was also teacher of mathematics and science in Albany Academy, a military school for boys. Furthermore, from 1897 to 1906 he taught chemistry in the Albany Medical College, served in the state department of health and agriculture as chemist and was examiner in chemistry for the state civil service commission.

One cannot help but marvel at the energy which he must have exhibited. During intimate conversations, the writer has several times been amazed by detailed descriptions of the young man's movements for a single day. Classes up to ten o'clock at one school, classes until noon at another, a long walk to the third after a hasty lunch, and long afternoons and evenings over papers and in the laboratory; these give an entirely inadequate idea of the day's work.

That he should have time on the side for other activities seems almost impossible, yet such is the case. He sang in church choirs, devoted considerable time to extraneous reading, sometimes attended the theater and yet found time to enjoy some moments with his family.

In all these strenuous years his most ardent love was the care of the boys at the academy. He often expressed in private conversations his desire to drop other work and devote all his energies to the training and education of these boys. And so, when the call came from the Massachusetts College of Pharmacy in 1912, it was a momentous struggle on his part to give up this labor of love at the academy.

For the past twenty-four years (it would have been twenty-five in June) he has functioned as dean and teacher of chemistry. His success in guiding the school through trying times and past all sorts of obstacles to its present position is well known. His ideals of a school which would be second to none in research and education, he did not live to realize completely, but no one can deny that the present institution represents a tremendous advance from the old building and the old two-year course, with its requirement for matriculation of one year in high school.

To those who watched him work day after day, it seemed that he must have labored continuously during all the waking hours. One would think that direction of all activities in the school and personal supervision of finances running into the millions should be enough for one man. But to this was added conduction of classes in arithmetic and history, with correction of a set of examination papers almost every day. Furthermore, he found time for numerous meetings and conferences and for outside interests of very diverse nature.

His interest in vocal music has already been mentioned. He was a member of the famous Newton Highlands Glee Club for a number of years and appeared with them in numerous concerts in New England and elsewhere. Quite frequently also he sang in choirs and especially at Kingston, N. H.

Primarily, however, the greatest outside attraction for him was in the theater, especially in the plays of Shakespeare and in grand opera. It was always with greatest regret that he missed such performances in Boston. Up to the time of his death he was almost a regular attendant at first nights and for many years had written initialed criticisms of these presentations for the Brookline Chronicle.

His interest in Shakespeare was so intense that he made a hobby of collecting illustrations for the plays which had been published in many places. Practically every book store in the metropolitan district acted as his agent in searching for samples to put in this collection. He bought set after set of the illustrated plays, carefully removed the prints or engravings and systematically filed these away in the proper places. His collection, admirably arranged is probably priceless.

During the war he was far from inactive in national affairs. He was a member of the committee, for the drug trade, on liberty loans and expended enormous energy in this work. In 1918 he spent considerable time in Washington in the interest of establishing a pharmaceutical corps in the army. In 1919, while a resident of Newton, he served as a member of the constabulary during the famous police strike in Boston. His unit was assigned to duty in the Back Bay district, from which place it was possible for him to secure time

enough during these weeks to attend his classes, usually in uniform, and to do most of his executive work.

President Bradley was always intensely interested in country life and some twelve years ago purchased a large farm at Kingston, N. H., fifty miles from Boston. Here he spent much of the time on Saturdays and Sundays from March until Christmas. Just a week or two before his death he spent all day Saturday personally installing a wire fence around part of the farm. The old house he had completely remodeled, doing much of the work himself in an exceedingly efficient manner. After retiring in a year or so, he intended using this retreat as a home for his wife and himself during his declining years.

He always had a great fondness for children. Perhaps no parent ever experienced more joy than he, over his children and grandchildren. Just a week before his last illness, in speaking to one of his associates about his grand-daughter, three months old, he remarked: "Do you know, it is amazing what a deep feeling of tenderness I have for that tiny thing."

Space does not permit, nor could woefully inadequate words of the writer express completely, a true picture of this lovable man. Many will remember him as always willing to help in a worthy cause and as a man eminently worth greeting. To those who were privileged to know him well, however, he meant a great deal more. No one could have been associated more than a very little with him without deriving much benefit from that association and without retaining fond memories. But the opportunity to become intimate with him inevitably led to present memories which will be cherished in a way that words cannot express.

Eldin V. Lynn.

Few men in American pharmacy have found or have deserved so well, the respect, the loyalty, and the affection that Theodore J. Bradley inspired in his friends and associates. Their high regard for him came from their appreciation of his sterling fundamental qualities, his manliness, his modesty, his sincerity. They found him always to be unassuming, approachable, understanding, and considerate.

Dean Bradley had a deep sense of duty. He never shirked a responsibility. When distasteful tasks confronted him, he performed them himself but with as little unpleasantness as possible, never hurting another's feelings if he could avoid it. No man ever tried harder to be wholly just in his judgments. He reasoned logically, one of the results of his scientific training. His whole life was planned. First he charted his course with care; then he followed it. Sometimes he was slow to move; he wanted to be sure that he was right. He was always master of himself. Seldom did he act impulsively even in matters of minor importance. He sought advice from those who could help him, but the final decision was always his own, a decision for which he accepted full responsibility.

Dean Bradley was a ready and fluent speaker and an enthusiastic teacher, interested not only in the subject he taught but in the men

he taught. He took great interest in their scholastic progress and a fine pride in seeing the men he had trained rise in the world. He was quick to aid them whenever the opportunity came. His achievements in the academic and scientific world were recognized by the awarding to him of honorary degrees by three important educational institutions. No one could serve under Dean Bradley without being impressed by his ability as an administrator. He was a good judge of men. He selected his faculty and assistants with much care. He asked no more of them than he was willing to do himself. After he had assigned their duties to them he left them alone, never interfering, and demanding only that satisfactory results be obtained. He had little patience with slipshod work, with neglect of duties, with the evasion of responsibilities. He was quick to praise, but able to condemn when it was necessary. He could be stern. He could fight, too, and he did, spiritedly, when he believed that he championed a just cause. Many men who crossed swords with him had reason to respect him as a worthy opponent. What these men, his professional associates, thought of him is evidenced by the fact that Dean Bradley held every high office that American pharmacy could bestow upon him. In no case was the honor sought. He was never a self-seeker.

Dean Bradley was a family man, taking great interest in his home. His family was to him a source of great pride. Seldom did he travel without Mrs. Bradley or some of his children accompanying him. He interested them in his hobbies, his farm, music, the theater, stamp collecting, and his professional writing.

Possessed of an unusually fine natural voice, Dean Bradley was a valued member of glee clubs and male choruses both in Albany and in Boston. He appreciated the best in music and in the theatre. A constant attendant at the opera and concerts, and frequenting the best plays, he developed a keen judgment on matters theatrical and musical, and for a number of years he served as critic for a local newspaper. In his later years his most engrossing hobby was the collection of engravings that had been used to illustrate the plays of Shakespeare in all periods. His extensive collection became so interesting and valuable that a public exhibition of it was requested. Dean Bradley's interest in architecture is reflected in the splendid home of the Massachusetts College of Pharmacy which he planned. Recently, he was engaged in supervising the construction and furnishing of a new wing to the college building.

Dean Bradley accepted his responsibilities as a citizen seriously. When he purchased a farm near a small New Hampshire village, he immediately identified himself with the community, and became interested in the problems of the district. He felt it to be his duty. In his political opinions he was strongly conservative. During the famous Boston police strike he served as a military guard over public property by night because he felt it to be his duty. He became exhausted as the days went by, but he continued his regular work at the college for he felt that, too, to be his duty.

Dean Bradley was a loving father, a good citizen, a capable executive, a gifted scientist, a successful teacher, and a loyal friend. Pharmacy has produced no finer figure. His stature will grow with time.

Hugh C. Muldoon.

At the request of the Editor, three men have written of Dean Bradley, his life and his accomplishments. These men were chosen deliberately and after much thought. It seemed to me that these men were best qualified to speak of him and his work. Dean Little observed him and his work at a distance with a calm and judicial mind. Dr. Lynn lived with him as a colleague and saw him and his work first hand. Dean Muldoon had the privilege of the most intimate relationship of all, that of student, counsellor, and intimate friend.

These men have written so sincerely, so feelingly, and so well, that it might seem nothing more could be said. And yet I felt that something had been left unsaid that should have been said. Furthermore, I had a feeling that, that something should come from someone who had "crossed words" with the Dean and so I write.

For a quarter of a century, it seems to have been taken for a fact, that Dean Bradley and I occupied enemy camps and these camps were at war. The bone of contention in this war had to do chiefly with the rate at which the standards of pharmaceutical education should be advanced from a two year high school and a two year college program to a four year high school and a four year college program. I was in the latter camp. And curiously enough, the records of the Massachusetts College of Pharmacy will show that Dean Bradley was in the same camp. As a matter of fact, as I write these lines I cannot recall a single instance in twenty-five years of working together, when Dean Bradley and I differed on anything fundamental. In debating the question of advancing requirements, however, Dean Bradley always went to the enemy's camp and defended the cause of those institutions that insisted on a slower program. This apparent inconsistency I could not comprehend until it dawned upon me one day, that the most dominating characteristic of Theodore J. Bradley's character was—a consideration for the thoughts, the opinions, and the feelings of others. This characteristic I consider the finest quality of the human soul. It was a basic fact of the teachings of Christ. So far as I am concerned, I do not know how to pay a finer tribute to any man, than to say that he had this characteristic to a high degree.

But there is one more thing I am impelled to say. I know it is not considered to be good form to become too personal in one's writings. And yet there comes a time in our lives when it is the personal touch which we most need and which comforts most. What I now say is for the comfort of his family and his friends.

The snows of ten winters have blown across the prairies of Nebraska since we lost our daughter, Caroline. Those days after she passed were awful crushing days. But to me it seemed that Caroline must be alive. Was it possible that her personality was gone forever, or was she alive? I sought my friends for comfort. I searched through books for comfort. Fosdick's *Assurance of Immortality* was at least a title that brought a ray of hope. Seeking through its pages I found those lines of Tennyson which read:

*"For nothing worthy proving can be proven,
Nor yet disproven."*

I recognized the truth expressed in those lines, but it did not answer my question. One autumn morning as I bent over a fading flower in the home garden, I heard a voice cry: "Doctor Lyman, Caroline is alive."

I turned and faced a tall, dark haired, gentle eyed oriental, a Syrian, who had peddled rugs up and down the streets of the city since Caroline was a babe. A man whose father and brothers had in the days of the war been pushed into the sea by Turks and whose aged mother was at that moment suffering from the awful aftermath of the war. In his face was a calmness, a sincerity that penetrated one's soul and brought comfort and hope. As I stood speechless, there flowed from his lips the words of the Master: "In my Father's house there are many mansions. If it were not so I would have told you. I go to prepare a place for you. And if I go and prepare a place for you I will come again and receive you unto myself, that where I am, there ye may be also."

The immortality Socrates longed for, Christ's promise made a reality.

Dean Bradley lives, not only in the hearts of men, Dean Bradley is himself alive. A pioneer in the field of pharmaceutical education, he cut a trail through the forest. With grateful memories and high hopes we will continue to follow that trail.

Rufus A. Lyman.

Address of the President of the American Association of Colleges of Pharmacy at Dallas, Texas,
August 24, 1936

by

ROBERT C. WILSON,

Dean College of Pharmacy, University of Georgia.

The detailed activities of the Association during the year, not already of common knowledge, will be revealed in the various committee reports, and I will not burden you at this time with a review of these activities.

I am, however, taking advantage of this opportunity to discuss with you some of the problems confronting American pharmacy, for the existence of which and for the solution of which the schools of pharmacy must assume a large share of responsibility.

In a material age such as that through which we are now passing, professional education, along with all education, has felt the urge to adjust itself to materialistic demands, entirely forgetful of the high principles by which it alone should have been guided. The result is that we find ourselves today in the midst of doubt and uncertainty—doubt as to the wisdom of our past activities or lack of them, and uncertainty as to how to plan for the future. That there has been a breakdown in the former high ideals and ethical standards of the professions and the high regard in which they were held, I think no one can deny.

In law, medicine, teaching, preaching, pharmacy, or whatever the profession, conditions have been allowed to develop whereby the erstwhile ideals and standards have been obscured at the hands of those, who, for expediency or for ulterior motives, have appropriated the professions to their personal advantage. They have ignored or forgotten the principle that the franchise, under which a profession operates and is thereby distinguished from secular activities, is granted only under the assumption or theory that the profession will operate or function in the interest of society, and not in the interest of an individual or group of individuals.

This break-down in professional standards is directly chargeable to the professional schools through whose doors each year come an increasing number of young men and women, who, because of the failure of the school to inculcate proper conceptions of ideals, adjust themselves to existing conditions and practices as they find them in the field, and thus continue the vicious cycle.

There appears to be some evidence that professional schools here and there, rather than struggle to set up and maintain their own conceptions of ideals and standards, are dictated to or subsidized by interests which would use them for their selfish objectives. They seem to have passively submitted rather than combat those practices which destroy professional ideals and standards.

True professional practice in America is threatened unless and until our professional schools rechart their course and recognize and assume the responsibility of guiding professional practices into channels of high ethical and spiritual character.

It is granted, of course, that each professional school, if it is to function effectively, must be provided with proper faculty personnel and physical equipment, but it must be recognized at the same time that technical training constitutes but one phase of professional training. One cannot conceive of a more potentially dangerous influence in society than highly trained professional individuals who lack the fundamental elements of character, and who do not have a proper conception of their responsibilities in the utilization of their professional training.

Thinking along this line, and recognizing that a true diagnosis of the problems and practices in pharmacy, if not made at our hands, will be made by other agencies not of our choosing; and that such a diagnosis will reveal some things the knowledge of which may be painful and which if not removed or modified will result in a delayed and doubtful prognosis, I have set up the following **standard of measurement for professional schools** by which I will check my own school and ask you to check yours. Frankness and honesty force me to recognize that my failures have been many, but, at the same time, I recognize that my opportunities and responsibilities are equally many.

A Standard of Measurement for Professional Schools.

1. A professional school does not justify its existence and maintenance if it concerns itself only with curricula and other mechanical details, and at the same time fails to assume leadership in its respective field.

2. It fails in its responsibility if it does not acquaint itself with conditions and practices and trends as they actually exist in that respective field, and properly diagnosing them, exercise a proper influence in correcting and directing them.

3. It fails if it does not concern itself with the personal character of its graduates so as to insure men and women of the highest type by whose conduct and ability that profession will be judged by the public and other professional groups; and to take such steps as may be possible to see that these graduates continue to be guided by high standards of character.

4. It fails if it does not actively identify itself with all proper agencies within the professions which have for their aim the improvement of conditions and the setting up and maintenance of standards, and exercise a proper influence upon these agencies.

5. It fails if it is not manned by individuals of broad vision, who have, not only a deep love for their profession and an intimate knowledge of its problems, but, who also have the proper conception of any responsibility for a real spirit of service; and if it does not imbue its students with these ideals of and responsibility for service to society rather than for personal gain.

6. It fails if it does not know the qualifications of character, of vision, of personality, and of fitness a person should have who is to participate in that profession; and, who, by the application of these qualities, would be capable of influencing and have a desire to influence constructive changes for the improvement and more proper functioning of that profession.

7. It fails if its students have not been so impressed that they have a respect for and confidence in its ideals, and, on leaving the school, may continue to be guided by it.

A Discussion of These Items as They Relate to Pharmacy.

1. Like other professional groups, pharmacy operates un-

der a franchise which distinguishes it from secular activities. The practice of any profession involves the application of certain spiritual qualities, indefinable though they may be, but without which the influence of ideals would be impossible. The hope of pharmacy in America lies in this intangible and indefinable factor of ideals and idealism, and our schools of pharmacy must assume the responsibility of their inculcation in our students. Without the influence of ideals, the franchise under which we operate as a profession will be nullified. **Herein lies a challenge; dare we accept it?**

2. The practices and trends which have crept insidiously into American pharmacy, if not corrected will relegate pharmacy to a non-professional status. These practices and trends which are familiar to each of us in all of their gruesomeness have been allowed to develop without the guiding hand of the schools of pharmacy. The schools have failed to observe and direct these practices either because of indifference, or of a lack of interest, or of an appreciation of their significance.

From a study of the catalogues, we find that the curricula have been altered to meet the new conditions produced by the spirit of commercialism which has been allowed to pervade pharmacy, whereas, recognizing and properly evaluating these conditions, our curricula should have been made more definitely professional in character. We have seen the proprietary medicine interests prey upon the professional name of pharmacy, and make our graduates purveyors of their products, which in **many cases were of a most unethical character** and calculated to debase pharmacy in the public consciousness. And now that the large moneyed interests are dominating the proprietary medicine markets, they have "smitten the hand which fed them," and promote the sale of their products in other channels, never having had any real regard for pharmacy except to use it for their own ulterior motives and profit.

It is a sad picture to contemplate the vast amount of time, of energy and money which have been spent in recent years, under the guise of protecting pharmacy, in an effort to circumscribe manufacturing interests by legislative enactments so that these products, unethical though many of them may be, will be forced back into the drug stores. This situation is analagous to the withdrawal of a narcotic from an addict which for a time relieves the pain, but which in the end results in wreck and misery. Except for feeble efforts here

and there our schools of pharmacy have failed to recognize their responsibilities in this premise.

The development of the chain drug store idea has been a potent factor in the destruction of professional ideals and standards in pharmacy, and has forced independent operators to meet this type of competition at the expense of the professional phases of their business. There are thousands of drug stores in America today which formerly were ethical places of business, but which have now been converted into lunch rooms, department stores, et cetera. This seemed to be necessary to meet the competition of merchandising establishments which have appropriated the good name of pharmacy as a decoy to attract the public. The chain store is, of course, operated solely for the dollar involved, and is controlled by groups of individuals who have no professional background or responsibility. To merchandise under the good name of pharmacy is the factor which is responsible for the large influx of undesirables into pharmacy in recent years. If pharmacy in America is to be dominated and controlled by these interests, or the principles which guide them, our schools of pharmacy will have no field in which to operate or function as professional institutions, for professional practices and principles have no real place in "chain" plans.

Here again our schools of pharmacy have lent themselves to materialistic demands since it is rather common to find a catalogue statement to the effect that among the opportunities for our graduates are "managers for chain stores." May God forbid!

There is no analagous situation to this in other professional fields—no chain law—no chain medicine—no chain dentistry—no chain nursing—no chain teaching—no chain engineering—Why, under heavens, chain pharmacy? Herein lies a challenge; dare we accept it?

3. No profession can be evaluated more highly than the personal character of its individual practitioners, and it will be so judged. It therefore behooves our schools of pharmacy to assure the public and those already engaged in the practice of pharmacy that the graduates from our schools have the proper qualities of character as well as the proper technical training. If it is the earnest desire of our schools of pharmacy to elevate the profession and practice of pharmacy, it becomes their first responsibility to see that those to whom degrees are granted are of proper character and will uphold

professional ideals and standards wherever they may go.

There are many thousands practicing pharmacy today in America who have not had the opportunity to contact with a school of pharmacy or individuals or agencies which might influence professional practices and ideals. So long as this group is an integral part of American pharmacy, the schools of pharmacy owe them an obligation, and if the schools have anything of value to offer they should assume the responsibility of influencing this group and rendering them every possible service.

If schools of pharmacy are to serve the profession of pharmacy, and through it the public, there is a definite sphere in which they may operate in the inculcation of proper ideals in their graduates and in those who have not been exposed to such influences heretofore. **Herein lies a challenge; dare we accept it?**

4. There is within every state, a state pharmaceutical association, a state board of pharmacy, and a state law enforcement agency. In addition to these we have our national groups, The American Pharmaceutical Association, The National Association of Retail Druggists, The National Association of Boards of Pharmacy, The Conference of Law Enforcement Officers, The Conference of State Association Secretaries, and The American Association of Colleges of Pharmacy. It would seem that there are enough organizations and agencies to meet every need. There still must be something radically wrong when, with all these agencies, the question we constantly ask ourselves is "What is the matter with pharmacy." This in itself is an admission of the fact. Article 2 of the Constitution of most of the state and national associations, in which the "object" of the association is set forth, is usually an array of words beautifully portraying the part the association should play in the promotion of scientific and professional activities. But if we are to judge from the programs of most of the annual meetings of these associations, one would assume that once the "object" is properly defined, it is promptly forgotten. We should consider that these gatherings of various pharmaceutical groups under the auspices of pharmacy, advertise and represent it to the public, and in the main, except for feeble efforts here and there, fail to devote any part of their program to scientific or professional discussions. The absence of these features is not only an indication that practicing pharmacists (many of whom are

our graduates) have no interest in them, but that the schools of pharmacy are likewise indifferent to them or shirk their responsibilities.

The fact that the membership in the American Pharmaceutical Association, whose object is to represent and promote professional and ethical interests, has suffered a severe loss in recent years; while the National Association of Retail Druggists, whose object is to represent the commercial interests, has shown a corresponding increase in membership, is but another indication of the loss of interest on the part of retail pharmacists in professional activities. The schools have failed to keep the fires burning. There may be a proper place for both of these national associations, but there should be and must be some proper co-ordination of their efforts if they are to render the best service to American pharmacy. They both need perhaps the tempering influence one of the other; but if state and national associations are to safely, sanely, and properly function in the interest of American pharmacy, there should be and must be some method of affiliation or co-ordination devised between all these groups whereby there could be some one group to speak for American pharmacy and direct its destinies. No house divided against itself, as the house of pharmacy seems to be, can hope to stand.

Recognizing the splendid start that has been made in co-ordinating the work of the Boards and Colleges, there must be a still closer tie-in between these agencies in the development of a more careful method of selecting those to whom licenses are granted if we would properly safeguard the good name of pharmacy and give it a dignified and proper place in American life.

There remains yet much to be done in the writing and passage of proper pharmacy laws in the various states, and a more definite relationship established between the Boards and Colleges on the one hand and the Law Enforcement Agencies on the other. No law enforcement agency can properly and effectively function without the sympathetic understanding and co-operative effort of all pharmaceutical interests.

When and if a proper co-ordination and spirit of co-operation can be established between the Schools and Boards, between the Schools and Law Enforcement Agencies, between the Schools and the various State and National Associations, and an interlocking relationship established between all of

these agencies, we will then have taken some definite step toward pointing our efforts to the solution of the immediate problems of pharmacy, and assure for it a definite, dignified and orderly place in the future. **Herein lies a challenge; dare we accept it?**

5. Service is a function or quality which in our thought has become definitely associated with all ethical and professional practices. It involves contributing or rendering to others or to a cause without hope of personal reward except for an inner satisfaction from the consciousness of a duty well done.

Pharmacy is definitely a service profession, and under present conditions renders a high type of service to more individuals of America than any other profession. The pharmacists of America come into intimate contact almost daily with the entire population of America, and thereby have an opportunity, to a far greater extent than is true of any other group, to advise in the matters of health, of general scientific nature, and in many matters affecting the personal and family life of the entire people of America. Their contacts being so many in number and so varied in scope, pharmacists should be of the highest ethical character, and scientifically qualified to perform a most important function in American life.

Herein lies a challenge to our schools of pharmacy, if we dare accept it, to influence those already operating drug stores to recognize and assume the responsibility for service; and to prepare our graduates from the standpoint of character, of fitness, of vision, and of scientific knowledge and viewpoint to assume their responsibilities and realize upon this opportunity to place pharmacy definitely in the forefront of the professions.

6. The criticism is being made, and perhaps justly so, that our college faculties are composed of individuals who are theorists and who have no actual knowledge of the conditions and problems in pharmacy. To what extent this criticism is justified is left to your judgment to determine. But, I agree in principle, that no school of pharmacy can intelligently prepare its graduates to assume their proper places in retail or other pharmaceutical activities unless it has an intimate acquaintance with existing conditions and problems, and with the qualifications of fitness an individual should have who is to practice pharmacy. As the result of carelessness or indifference of the Colleges and Boards of Pharmacy in the matter

of qualifications or fitness for those who have entered the practice of pharmacy, there has naturally crept into the ranks an appreciable number of individuals who, by no reasonable standard of measurement of fitness, character or training, could be classed as professional practitioners. And, so long as they remain in pharmacy or their number materially increases, they will constitute a menace to its good name and professional status. **Herein lies a challenge; dare we accept it?**

7. Our colleges, universities and professional schools spend much time and energy in an effort to build up strong alumni organizations. I believe a survey would reveal that those institutions having the most loyal and interested group of alumni would be shown to be those whose ideals and standards have been maintained on the highest level; and, who, having so impressed their students with these ideals and standards, are thought of by them in after years with confidence and affection and will continue to serve as guides to them. It is such factors as these which make it possible to build up and maintain worthwhile college and professional traditions, and not athletic or other spectacular activities unless they are secondary to and involve the same ideals and standards. A college, or school, or university, without traditions of the highest order, has somewhere fallen short of its opportunities, and the cause, in whose interest it was supposed to function, would have progressed farther and on a much higher level had it never existed.

Pharmaceutical traditions must begin with and continue to be maintained by our schools of pharmacy if we would unify all pharmaceutical interests toward the creation of a heritage for future generations of which they would have cause to feel proud and which they would sacredly guard.

Regardless of how severely I may have painted the picture of the problems of American pharmacy, I am not pessimistic over its future, for I believe that within its ranks there are those with ability enough, with character enough, with vision enough, and with courage enough to solve existing problems and cope with any which may arise in the future.

I feel that introspection such as this may be worth our while individually and collectively, and, if, in your judgment, there is any worthwhile thought in this discussion, which may be worthy of further study, I recommend that such matters be referred to the Committee on Problems and Plans for their study and recommendations.

Address of President Harmon W. Caldwell

University of Georgia

I appreciate the very kind introduction of Dr. Wilson. I assure you that most of the things he said are things of which I am wholly undeserving, and of that you may judge for yourselves in the course of the next few minutes.

First of all, I want to acknowledge my debt of gratitude to the gentlemen, or to the gentleman who suggested that we dispense with formal evening clothes or formal dinner clothes. Dr. Wilson told me to bring out a suit, which I did, and I sent it down to be pressed this morning, and there came back in its place a dress. I felt somewhat reluctant about wearing that. I am very happy that this change of plans has relieved me of that embarrassment.

I count it a great honor and a great privilege to have the opportunity of meeting with you tonight, and I assure you that it is an equally great pleasure.

When Dr. Wilson, the President of your Association, came to me some weeks ago and asked that I come here and talk at this dinner, I at first declined the invitation. I felt that the subjects in which you would be interested were subjects about which I know very little. As Dr. Wilson has told you, I went to Harvard with the idea of studying to be a lawyer. I came back and practiced for five or six years, and when I went to the university it was with the thought that I was going there merely for a temporary stay. I don't know how temporary it is going to be, but it has developed into a much more extended stay than I originally contemplated. Nevertheless, Dr. Wilson insisted that I come, and he reenforced his invitation by a letter from Dr. Lyman. Since I have always been in the habit of obeying my superiors, or my elders, I agreed to do as Dr. Wilson requested.

It was then that Dr. Wilson made the very comforting expression, comforting to me, at least, that I wasn't really expected to say anything out here, that he wasn't asking me to come out for the purpose of saying anything to you, and his primary reason for wanting me to come was so that I might learn something myself. So, I am here for that purpose, and I assure you I learned a great deal this afternoon. I sat for three hours and fifteen minutes through your

discussions downstairs, and I found them very enlightening and very inspiring.

I asked Doctor Wilson whether or not I should use a manuscript for this occasion, or whether I should speak extemporaneously or gather a few thoughts together and discuss them in an informal manner. He said I would have to write it out for the record, but that I could get along better, perhaps, if I wouldn't read my manuscript. But I wrote it out in a rather hasty manner, and I must confess I haven't reread it since I wrote it, and I am afraid if I undertook to discuss the topics I outlined in this little memorandum without any more study of the subject, I would be in about the same fix as one of our speakers who came to the University of Georgia some years ago and about whom the former president has told me.

A distinguished speaker from a northern state was invited to come down and address the university on some patriotic occasion. The president happened to be in Washington at the same time, so he came back on the train with this speaker. Coming down on the train together, something was said to President Sanford about the necessity of using a manuscript or the advisability of speaking without it. Dr. Sanford told him, "Those people down there don't want to hear any manuscript. They want you to say what you have to say and not look at any paper." So the gentleman sat down rather hastily and tried to memorize what he had written down in his paper but was rather an absent-minded gentleman; he didn't remember it very well.

So, when he got up to speak, he put his manuscript in his inside pocket, walked up on the chapel stage, told the students he had come there that day for the purpose of telling them about three great Americans, and he stooped down and looked at his inside pocket again and said, "Three great Americans who are the very embodiment of the American spirit and American tradition." His memory failed him, and he had to look again. He said, "Three men who are universally respected and admired by all American people, whose names are known to every American child, whose names are household words throughout the country." He had to look again.

He said, "Whose names are known even to the foreign nations and respected and honored even by them. And, gentlemen, who were those three great Americans, those

men whose names each one of you should emulate and follow? Hart, Schaffner and Marx."

So, perhaps I had better fall back on my manuscript lest I fall into some blunder that is equally embarrassing. But before proceeding further I must say a word about the accomplishments of this Association.

The status of pharmaceutical education in most sections of the country was in a pitiable condition in 1900 at the time of the organization of the teachers in the schools of pharmacy of the country, an organization which has since come to be known as the American Association of Colleges of Pharmacy. That organization has rendered magnificent service for the cause of pharmacy itself, not only to the cause of pharmacy itself but to all persons who have dealings with pharmacists.

The efforts of this Association in bringing about higher requirements for admission to schools of pharmacy and a better quality of work within the schools themselves, merit the gratitude of every citizen of this country.

Let me, as an outsider, as a member of another profession, congratulate you on the splendid work which you have done. For ten or twelve years I have watched closely the work of the Association of American Law Schools. Their problems are, in many respects, similar to the problems with which you are faced. I know something of the problems that you had to go up against, and the fact that you have gone up against them and have come out victorious indicates the courage and the determination with which you have gone into the fight.

The work which Dr. Wilson has done in the State of Georgia with the backing of this Association is, I believe, typical of the work for which you have been responsible throughout the nation.

Only a few short years ago in Georgia the requirements for admission to the privilege of practicing pharmacy were astoundingly low. I have been told that many registered pharmacists did not even possess a grammar school education. Certainly, there was reason to question the thoroughness of their pharmaceutical training. One who was given medicine that had been compounded by one of our pharmacists had ample grounds for insisting that a certain medieval practice be followed, that of saying a prayer as each dose was administered.

As for the wider fields of professional service open to the trained and educated pharmacists, many of our registered pharmacists of earlier years were never able even to catch a vision. By long and patient toil, Dr. Wilson has brought to the people of our state a new conception of a pharmacist, of his duties and of his opportunities. The doctrines which he preached spread slowly but ultimately they permeated the profession, and finally they became crystallized into law.

It was in 1933 that the General Assembly of the State of Georgia passed a bill prescribing that each applicant for registration as a pharmacist should be a graduate of a recognized school of pharmacy and, in addition, should have had twelve months of practical experience as an apprentice to a licensed pharmacist.

Dr. Wilson's school, which is operated in strict conformity to the high standards prescribed by this Association, is now the only school, in our opinion, which is legally qualified to operate within the state.

This law, when it is made effective, will accord an assurance that those who enter the profession in our state in the future will be qualified to discharge the duties which rest upon them. It is an assurance to our citizens that they will receive from pharmacists, not only a more intelligent and a more competent service but a service much broader in its scope than that which they have received in the past. For this, the people of the state will ever be grateful to Dr. Wilson and to this Association which has given him the moral backing which he needed to make his crusade effective.

This suggests one of the great values of this Association. As a national association of teachers of pharmacy, its recommendations and requirements possess an authority which command respect and obedience. With the backing of this Association, the fight of schools for improvement of the local conditions becomes infinitely easier. This organization has the power, practically, to impose its will on the schools of pharmacy of the country and, through them, to influence the whole profession of pharmacy.

This fact means that you possess great opportunities. It also means that you have great responsibilities. In the exercise of the power which is yours, you must have vision and courage—vision to see ways in which pharmacy and the schools of pharmacy can be raised to even higher levels of professional attainment, and courage to do those things

necessary to make these visions realities, even though it may mean a break with precedent and a departure from the beaten tract.

I do not wonder that you have been willing to put forth great efforts to bring your profession greater recognition, for of its history, its traditions, its contributions to the service of humanity, you may well be proud.

In the very dawn of history we find men performing the functions of pharmacists already at work. In ancient Egypt, Babylonia and in the Orient, the compounding of medicinal preparations was an activity to which many of the most learned and most skilled of men devoted their energies. As early as 2250 B.C. we find a flourishing trade in drugs between Egypt and Babylonia. In a library of Asia there has been discovered a list of 250 vegetable drugs and 120 mineral drugs. In a document discovered in Egypt, which goes back to 1500 B.C. there is mention of no less than 700 different drugs known to the people of that day.

To those of you who are familiar with the Old Testament, and I hope all of you are, we find constant reference to apothecaries and to the work of apothecaries.

The pharmacy of these early periods was different in many respects from the pharmacy of today, just as other professions of modern times differ from their counterparts of earlier ages. Law was once looked upon as an emanation from a divine source. The ancient code of Hammurabi was supposed to have been given to the Babylonian king by one of his country gods, and the Hebrews believed that the Mosaic law had a divine origin, and, since the gods made their revelations to their priests, it was only natural that the priests were the first law givers and the first lawyers. So it was with the art or the science that we now know as pharmacy.

It was believed that the gods had transmitted to their priests knowledge of the herbs and medicinal plants and the properties of those plants in the curing of diseases. The art of healing was taught in the Egyptian temples, according to the records as they come down to us, as early as 3000 B. C.

It was natural, too, that among the ignorant, the healing of diseases should become associated with magic, witchcraft and superstition. It was believed by some that diseases were caused by demons within the body of the sufferer, and that certain plants or herbs possessed the power to drive out

these demons. The treatment was therefore accompanied by certain rites and ceremonies.

Even in more recent centuries we find traces of the influence of these early practices. In the late Middle Ages, pills were believed to be more effective when given in odd numbers rather than in even numbers. A prescription of seven pills or seven doses of medicine was a particularly favorite method with apothecaries and medical men because of the supposedly sacred and mystical character of the number 7.

But as crude and as unintelligent as were some of the beliefs and practices of early pharmacists, they were not more so than were the beliefs and practices of members of other professions. The foundation was being laid not only for the development of pharmacy but for all the sciences which contribute to it. Indeed, the men who were doing the work of the pharmacist in those early days sponsored the development of these related sciences.

The chemist was the doctor or the apothecary who compounded his medicines from liquids, powders and mineral substances. The botanist was usually the doctor or the apothecary who made his medicines from herbs.

The cultivation and study of medicinal plants in the gardens of the medieval monasteries was the very beginning of the modern science of botany. Modern science owes much to the apothecaries of old, and it is that which is too frequently forgotten, perhaps because the work which we now regard as properly within the field of the pharmacist was frequently done by persons who bore other titles.

The thing which so long retarded the development of pharmacy, medicine and the other sciences, was the inclination of earlier generations to refrain from experimentation and thinking and to follow precedent, to accept without question, whatever had already been said or written about a particular subject. They sought to solve their scientific problems by resorting to authority, by arguments and by dialectics. The theory of Aristotle regarding gravitational attraction, that the speed of the falling body was in proportion to its weight, was accepted for centuries, until Galileo, by an experiment, demonstrated that it was false.

Galileo's claim that he had discovered spots on the sun was ridiculed because those who had looked into the books

could find no mention of sun spots. What was true of the perpetuation of errors in the field of the physical sciences, was also true in the field of the biological sciences and in the field of pharmacy.

The same mistaken conceptions of the functions of human organs was passed on from generation to generation. The same mistaken notions about the properties and effects of drugs were continued.

For ages, the views of the Greek Hippocrates and the Roman Galen were unchallenged. As late as 1560 a doctor was denied admission to the London College of Physicians and Surgeons until he had signed a recantation of his error in having questioned the infallibility of Galen, who had been dead for 1400 years.

With the growth of learning and with the stimulation of intellectual activities which followed the Renaissance, there came gradually an inquiring turn of mind which questioned all things, which sought the meaning of all things, and which was determined to go down to the bedrock of truth.

This new approach to the problems of the day was responsible for the breaking of the shackles of ignorance and superstition, for a turning away from the blind and unquestioning worship of tradition and precedent. All branches of learning felt the effect of this new force, and none was more profoundly influenced by it than was science in all of its branches.

The day of the development of pharmacy on a truly scientific basis had dawned, and what has happened during the centuries since that time is a familiar story to us. The work of the pharmacist has been revolutionized, and it has become infinitely more valuable and serviceable to society. The value of the contributions of the research workers in this field to the welfare of humanity cannot be over-estimated. They have discovered new drugs for the cure of diseases which once were regarded as incurable. They have told us of the real properties of drugs and of their effects on the human body, and have been responsible for the discontinuance of the use of certain preparations that were discovered to possess harmful ingredients. They have found new drugs that are far more effective in the producing of certain results than others which were previously used for those purposes.

The State of Georgia claims the distinction of giving to the world one worker in this field whose discovery has

placed him in the ranks of the great benefactors of mankind. Years ago, in the year 1842, if I remember correctly, a young Georgia physician by the name of Crawford W. Long discovered the anesthetic properties of ether. This discovery has done more than any other discovery of mankind to banish from the world the specter of pain and suffering. Many monuments have been erected to the memory of this man who found how a single drug might be used to alleviate the pain of his fellow-men.

Today there stands in Statuary Hall in the National Capitol, a statue of Crawford W. Long, along with that of his roommate at the University of Georgia, Alexander H. Stephens, who was at one time vice president of the Southern Confederacy. No son of Georgia is more loved, honored and respected than Long.

This is only a single example of the sort of regard that comes to one who serves mankind nobly. Much has been done toward increasing our knowledge in the field of pharmacy, but much remains to be done. As long as sickness and disease are in the world, there is work for the members of this profession, work that challenges the very best and the highest that there is in us.

The work of a pharmacist, if it be done properly, requires genuine ability and a thorough scientific training. But a pharmacist must be a scientist, of course, but he must be more than this: He must be a scientist inspired by an earnest desire to use his ability and his training for helping his fellow-man. He must, in a word, be inspired by the ideal of service.

This is a thing which distinguishes the work of the pharmacist and other professional men from the work of the mere expert or technician. It is not likely that a pharmacist will ever receive for his services the compensation which he might receive in other lines of endeavor. From a financial standpoint, the potentialities are not so great. But there is a compensation that is not of a pecuniary sort, a compensation that may be infinitely more satisfying to one who loves his fellow-man, and that is the inward satisfaction that comes from doing something for somebody else.

If a man is so constituted that he counts as naught such a reward as this, then he does not belong in any profession. Here is a great task for the professional schools of America to instill into their students the ideals and spirit of the pro-

fessions they teach and to withhold their stamp of approval from those students who do not respond to such teachings.

It cannot be denied that the public frequently thinks of a pharmacist as merely a proprietor of a particular sort of store. It must be confessed that there is some justification for such an opinion. We should not blame the public, however. We must blame the pharmacists who have conducted their establishments in accordance with the standards of the market-place. Perhaps we should go back a step further and lay the blame at the door of the schools whose teachings dealt only with the technical and commercial aspects of pharmacy. The greatest offenders have been the proprietary schools operated primarily for private gain. Many of these schools have accepted all comers, provided they were able to pay the tuition fees. They have offered the training necessary to enable a student to pass the examination given by the state board of pharmacy, and there their work ended. A student was turned loose with no higher conception of pharmacy than that it was a means of livelihood.

Such students became pharmacists, handicapped by their own limited outlook and also by the unsympathetic and indifferent regard of the public for them.

In recent years much has been done to correct this situation. The poorer proprietary schools have been unable to meet the standards set up by this Association. Their importance has waned, and the field of pharmaceutical education has come to be dominated by the publicly supported institutions of learning and by privately endowed institutions. These institutions have shifted the emphasis to the service phase of pharmaceutical work, to the professional as distinguished from the mere occupational. They are beginning to turn out men who are not mere technicians but men who are versed in the history, in the ideals of their profession, and men who have a deep comprehension of the problems of their profession.

The surest way to get pharmacy on a really professional basis in the minds of the public is to divorce it from the commercial atmosphere in which it has so long moved and had its being. Personally, I hope the day will soon come when we shall have apothecary shops instead of drug stores that sell everything from bathing suits to toasted sandwiches.

In 1558, an English doctor by the name of William Boleyn

laid down some good rules for the practice of pharmacy, and one was that the pharmacist should meddle only in his own vocation.

It seems to me, also, that pharmacy is a profession which cannot be practiced by corporate or nonprofessional agencies any more satisfactory than law can be. The obligations of a pharmacist should run to the members of the public whom he serves rather than to a corporate employer. The chain drug store idea is one which is particularly foreign to the conception that a licensed druggist or pharmacist is a professional man owing certain duties directly to those with whom he deals.

The members of this Association, at least, should not be distressed by a recent act of Congress known as the Robinson-Patman Act which provides, among other things, that it shall be unlawful for any person engaged in commerce, either directly or indirectly, to discriminate in price between different purchasers of commodities of like grade and quality.

This act destroys one of the chief advantages which chain stores formerly possessed over their independent competitors. It makes possible the revival of the privately owned and individually operated enterprise. It should be of assistance to the pharmacist who really wants to operate a shop on a strictly professional basis. I believe that we can approve of that. I believe that even Dr. Lyman can approve of the spirit of that act, in spite of the fact that it is an expression of a New Deal policy.

The future of the profession of pharmacy is brighter today than it has ever been before with so many young men going into the profession, not only with the best scientific and technical training, but also with that liberal education which will enable them to appreciate the social obligations which rest upon them and the opportunities for service which are theirs, we may expect some desirable things to happen. It is not too much to hope that the work of the pharmacist will come to occupy that position of outstanding importance in the life of the American people which it should occupy. Pharmacy, however, should not be the whole life, even of the pharmacist.

Emerson once lamented the fact that our schools were prone to offer courses of training that produced scholars. His thought was that the first object of all training should be to produce men; then there would be man the scholar,

man the lawyer or man the pharmacist. There is a difference between a mere pharmacist and a man who is a pharmacist, and it is this difference which our schools should constantly bear in mind.

We must in some manner impress upon our students the fact that character is the basis of all worthwhile achievement, and we should not let them lose sight of another fact, and that is that, however important the work of their profession may be in the scheme of things, it is, after all, only one phase of the work of the world. Because a man is so much closer to his own work, it is likely to loom larger in his eyes than the work which others are doing. Sometimes it may assume such large proportions that it will cut off his vision of everything else.

The educated man must strive always to see things in their true perspective. He must not forget that all phases of the world's work may be, in the final analysis, equally important. The common, ultimate goal of all is the building of a finer civilization, a civilization in which the reasonable needs of all may be provided for, and in which each individual may find for himself a measure of happiness and contentment.

Professional men are peculiarly responsible for their particular part of the work that must be done to create this better civilization. They must do that well, but they must also cooperate with workers in other fields so that, through the united efforts of all, we as a people may come to the attainment of our common aspirations.

It has been a great pleasure for me to come here and to have been with you tonight and to have had the opportunity of meeting you. I want to thank you sincerely for your kindness in permitting me to meet with you this year.

When introducing President Caldwell Dean Wilson said: This is a delightful occasion which brings us together here. I hope that similar occasions will prevail as long as we have an Association. I think it brings about a better understanding. It shows a spirit of comradeship and is very worthwhile.

In the life of most educational institutions there come disturbing periods now and then, when a change in the executive of the institution occurs. We have passed through such changes as this several times at the University of Georgia in recent years. We now hope that we will not have another change in our executive for a period of at least twenty-five years.

The president of our institution is one of our own graduates. He made a magnificent record in the academic department of the institution. He left us and went to Harvard to study law, where he duplicated his splendid record at the University. Returning from Harvard, he was called to the deanship of our law school at the University of Georgia. In the short time that he was dean of this school, he made remarkable progress in every way. A year ago he was called to the presidency of the University of Georgia. His election to the presidency of our University brought happiness and confidence to all of the members of the faculty, regardless of the schools in which they labored.

In coming to us, he has an acquaintance with professional education, as dean of the law school, and in the course of the year, he has manifested much interest in pharmacy. He has given a most attentive ear to the problems concerning our work that I have had the opportunity to present to him. I am particularly happy that he is here with us to know something of our problems and I believe will be a factor in pharmaceutical education in the years to come, throughout this country.

I don't want to start an argument with Dean Beard, but the University of Georgia is the first state chartered university in America. Our president, I believe, at the present time is perhaps the youngest college president in America, of a major university.

I am particularly happy and proud to present to you at this time, as our speaker, Mr. Harmon W. Caldwell, President of the University of Georgia.

When responding to President Caldwell, Dean Lyman said:

I hope, ladies and gentlemen, that you will not think me sacrilegious when I say that there are some things that are too sublime to be followed by any comments. Most sublime of all human events was the Last Supper. And when the Last Supper was over, the only thing that could be done was to sing an hymn and go out.

Tonight, President Caldwell has painted a most inspiring picture. As he painted it, I thought of another great character in the educational world whose path I once crossed. I speak of President Edmund Jane James, of the University of Illinois, who was very largely responsible for bringing that institution to the high point that it has reached in the educational world.

Once, in a conference, he said, "The trouble with pharmaceutical educators as I know them, lies in the fact that their visions are bounded by the four walls and the ceiling of a drug store". Tonight we have been raised by this inspiring message, to great heights and I am sure that President Caldwell, as a member of another profession, has inspired us to a greater endeavor in public service than could have been done by any member of our craft.

As a result of the statement that President James made some

years ago, it became the policy of this Association to ask some man of prominence, preferably some educator, to be our guest at the annual meeting. This custom was instituted at the annual meeting at Cleveland in 1922, when our guest was none other than the only great statesman now left to the Democratic party, namely, the Honorable Newton D. Baker, Secretary of War in President Wilson's administration. Since that time we have listened to the inspiring addresses of many men, great educators in their field, but I know of none finer than the one we have had tonight.

It was also felt, at the time that this policy was adopted, that it would be a fine thing to have these men of vision come to us in order that we might know them better and in order that they might better understand our problems. Much has been accomplished in this line. It is accomplishing for our Association and for our work the same thing that some outstanding women are accomplishing for our country—some of the women who have not yet been plowed under. I have in mind tonight, especially, two women, one Margaret Mitchell, who has put into a book the life of the South, that magnificent book "Gone With the Wind". When you read it, you will understand the people of the South as never before and you will understand why the people of the South, of which Georgians are a type, cannot be subdued. And you will love them too. The other woman in the case is Marie Sandoz. She was born of a stock, headed toward the setting sun, with a rifle between his knees, driving hard. If you will read her book "Old Jules", you will be imbued with the spirit of the west. You will understand why the people of the west of which the Nebraskan is a type, pays no attention to grasshoppers, or hot winds, or dust storms, or a secretary of agriculture who advocates the plowing under of food. Read "Old Jules". Know us and our problems and you will understand why we cannot be subdued and you will love us too.

What finer work could two women do than to consecrate their talents to a better understanding of our people.

And what finer service can such men as Newton D. Baker and President Caldwell do than to bring a better understanding and a better appreciation of the problems and the service of the various professions.

I can only say, President Caldwell, that we are grateful to you for your contribution to our work at this meeting and we know that your service for pharmacy will not end here. Through the years to come we will think of you as an inspiration and, not only that, sir, we will remember you with affection.

The Dangers in the Present Two-Year Time Requirement for Graduation from Colleges of Pharmacy

J. GROVER BEARD

University of North Carolina

At the 1935 meeting of this Association the Committee on Educational Standards recommended, among other things, that students should be matriculated four full years in a school of pharmacy in order to graduate. The Committee on Resolutions, to which the report was referred, recommended disapproval, and vigorous debate on the question began. Finally, Dean Jordan moved that the number of years be made three rather than four, and fixing the date when it should become effective at 1937. Dean Briggs explained that a change from the present two-year plan would be hurtful to his school. Dean Rudd finally moved that the whole matter be tabled. The motion passed. The writer opposed this disposition of the question and moved that the suggested change to three years be studied by the Executive Committee with report to be submitted this year. The motion prevailed. This preface is added in order to explain why this paper is submitted.

The purpose here attempted is to establish, if possible, that Article VII, Section 6, Paragraph 8, of the By-Laws holds elements of danger to pharmaceutical education. The paragraph reads as follows:

"Credits earned in a standard college, one recognized by the state educational department or by the state university in the state in which it is located, may be accepted for face value in a college of pharmacy insofar as such work applies on the course in pharmacy, but regardless of amount of credit offered no student shall be permitted to complete the course in pharmacy in less than two collegiate years."

This paragraph was recommended for inclusion by the Executive Committee at the meeting in 1934 during a general revision of the By-Laws. The purpose of the Committee may have been to guarantee that a graduate should have spent at least two years in a school of pharmacy in order to receive a pharmaceutical degree. Whatever the intent, the fact is clear that the paragraph has been put into reverse english

and accurately phrased as meaning that only two of the four years of study need to have been completed in a member-college. Read in this way it becomes a license and not a limitation because it is an official admission by this Association that the curriculum of applied pharmaceutical courses can be taught properly in two years. One may say that in terms of insufficient orientation; compression or intensification of subject matter; and the lack of integration of cultural or basic and applied courses, we have thus turned away from the principle upon which the four-year course was originally founded. This statement will be challenged because we do not want it to be true. The fact that member-colleges do not regularly follow the two-year idea does not disprove the argument that they may do so within the framework of this organization and not violate a single regulation. Paragraph 8 should be amended to read at least **three** years instead of **two**.

It should be borne in mind that an appreciable number of our colleges, as shown by current catalogues, have little if any more than two years of applied pharmaceutical work in their four-year schedules. This fact of itself is not as alarming as is the growing tendency to place virtually all of it in the last two years. This condition prohibits a proper spread and integration and orientation of applied courses, and is, therefore, a definite danger. Our curriculum at the University of North Carolina now is suffering from a lack of sufficient applied courses because the staff must be augmented by at least another teacher before a correction can be made. Increasingly, service courses have been substituted. This year we have been forced to discontinue one of our three specialized curricula. In appealing for more teaching help, we dare not mention this Association's requirements in respect to applied courses in spite of our need. So much for that.

A graduate of a junior college can in certain of our member-schools receive the degree of bachelor of science in pharmacy in two years provided that such junior college is "recognized by the state educational department" and provided also that proper credit is offered for the basic and cultural subjects required for the pharmaceutical degree. We have in our state five junior colleges that are recognized by all of the accrediting agencies described in Paragraph 8. Four of them have approached this writer requesting him to sug-

gest a curriculum which they could adopt that would fully meet our cultural and basic requirements in order that their graduates could gain a degree from us in about two years. Paragraph 8 would allow this.

But harken to this: A prominent member-school last fall began placing all of its first and second year students in the General College of the parent university. Is this not entirely legitimate under paragraph 8? More to the point, is it sound from the standpoint of pharmaceutical education? How many listeners would welcome this change in their institutions? Who can say that it will not come to them whether they like it or not. Let us follow a hypothetical case.

A university president or administrative group learns (1) that a number of colleges in this Association devote practically the first half of their curriculum to subject matter that is given in any standard college of arts and sciences; he learns (2) that the only national organization of colleges in this country has recently amended its By-Laws so as to require for graduation only half-time residence in a school of pharmacy (which hardly increases his respect for pharmaceutical education); and (3) he receives from the budget officer of the local school of pharmacy a request for a new or modernized building or additional space or additional funds for equipment, staffs, maintenance, supplies, etc.,—when he learns these facts and gets these requests what is more natural than for such an administrator, fortified with the knowledge that one well-known university has already paved the way, than to conclude that a similar plan would be to assimilate first and second year students of pharmacy into the academic division at a lesser cost and with seemingly no impairment of the school of pharmacy. Paragraph 8 offers no impediment to this procedure; in effect it actually fosters it.

Last fall, in a general reorganization, the University of North Carolina created a General College headed by a dean. This dean very shortly wondered why students of pharmacy should not be absorbed into this College by the simple expedient of delaying until the third and fourth years instruction in the applied pharmaceutical courses that are now in the lower division. Could our school have received any protection whatsoever from this Association if protection had proved necessary? Absolutely not. On the contrary, the permission

and implication of paragraph 8 would have been used as weapons against us.

For any dean or staff to say: "This sort of thing cannot happen in our university" is to ignore, for example, the fact that a change in administration or a general reorganization may quickly mean a drastic change in policy. Perhaps to some deans it may seem a matter of inconsequentiality whether they have jurisdiction over lower division students or not. To this writer, however, who has had twenty-seven years of teaching and administrative experience and twenty-four years of consecutive service as the Secretary-Treasurer of his State Association, it is quite consequential. He knows only too well that practicing pharmacists who have sons, or clerks or friends in the school want to talk with him or the staff about such students. Regular contact with dean and staff was the custom in their day. The public, as represented by parents, want also to talk about the progress or problems of their children. How could a dean talk intelligently about a student who for two years is neither under his direction nor a member of his classes but instead is registered in the General College? These are homely matters but are they unimportant? Thirty-one members of this Association, or about sixty per cent., are units in state-owned colleges or universities. To a real degree they must be responsive to the people of the state. The *laissez faire* attitude must be left to endowed institutions.

There is quite another angle to this whole question. Members of boards of pharmacy and the better type of practicing pharmacists feel that they have a stake in pharmaceutical education. We educators may be too prone to believe that once we have declared an educational policy to be sound we may smugly assume that its self-evident wisdom will be apparent to all pharmacists. This take-it-for-granted assumption is not always safe. Prerequisite legislation leading to higher standards is a case in point. It may be well to remember two facts: (1) According to Secretary Christensen "the recommendation of the **four-year course in pharmacy** as the minimum educational requirement in 1932 and thereafter originated with the National Association of Boards of Pharmacy in 1927;" and (2) that board members and organized pharmacists are the ones who actually secure this legislation, however much college men may have inspired

the successful effort. It is only natural that this dominant group should be interested in the content and sequence of the four-year course. While it may be granted that the members of the group are interested equally with us in wanting pharmaceutical education to be broader and more liberal in its scope than was formerly possible, it is nevertheless true that in the lengthened course of study they expect that more time will be devoted to subjects that have a direct pharmaceutical application. Furthermore, they generally assume that applied courses will be spread over, not segregated from, the main body of the curriculum. Vitally important is the fact that a majority of students of pharmacy nowadays enter college with little or no practical experience. Boards of pharmacy in all save a very few states require experience ranging in time from three to four years. Increasingly, these boards are allowing more and more months of successful study in a school of pharmacy to count in lieu of this drug store apprenticeship. Some are even allowing the substitution to count month for month. However, District Number 1 (New England) has already adopted a resolution making the minimum amount of time to be spent in a college of pharmacy three years. The National Association of Boards of Pharmacy will consider this resolution for national adoption. The Ohio regulation may be a warning of what other boards may do. On page 23 of the recent report of the Council on Pharmaceutical Education, Secretary Christensen is quoted as saying "If 50 per cent of the time can be given over to cultural subjects then the boards of pharmacy will have to demand more retail apprenticeship to make up the deficiency of the college course. . . ." Really, can we, in good faith, certify that an academic transfer student or a junior college graduate who has obtained his degree in pharmacy after only eighteen months residence in a school of pharmacy—can we certify that he has had the equivalent of twenty-seven or thirty-six months of practical drug store experience? To answer this question as one dean did last year with the statement that board members do not look behind the diploma may shortly have to be phrased in the past tense.

But to the final point. During the days when this Association was striving for general agreement to change the minimum degree requirement from three years and then to

four, a frequent argument heard was that not only should more cultural subject matter be brought into the curriculum but that there should be an opportunity to decompress—to stretch out—the applied pharmaceutical courses in order better to orient students in matters pharmaceutical by giving them a longer time in which to assimilate such material more thoroughly. The purpose, in essence, was to integrate the studies in such a way that during a four-year period a student would not be broadened in his life as a citizen but at the same time be oriented and adjusted to a richer and more responsible career as a pharmacist. This was a sound philosophic and pedagogic position to take. To it, came converts until the cause was won. Paragraph 8 seems to violate and nullify this principle. It should be amended to read at least three years instead of two, beginning January 1, 1938. The action should be taken before this meeting adjourns because it may be forced upon us when the matter is debated by the American Pharmaceutical Association and the Boards, and the Colleges, at the time when the report of the Council on Pharmaceutical Education is submitted at a general session of the American Pharmaceutical Association.

Abstract of Discussion.

Following the reading of his paper, Dean Beard moved that the Association vote on the recommendation of the Executive Committee at once, in view of the fact that members of the Committee had been studying the question for a year. Deans Jordan, Caspari, and Bradley, supported the motion.

The motion was opposed by Dean Briggs who discussed the question at some length and offered an amendment to the motion to the effect that persons having a baccalaureate degree, whose training met certain standards could submit their credentials to the Executive Committee for evaluation and approval and in case of approval, the institution enrolling them would not be bound by the three year requirement.

The amendment was supported by Professors Cook, Tan, and Osol, and Dean Mickelsen, and opposed by Deans DuMez and Jordan.

The amended motion was defeated on a roll call vote. The original motion was then adopted. (See report of Executive Committee, Paragraph 1, Summary of the Proceedings.)

What Legal Difficulties May We Get Into When We Abolish Assistant Registration?

H. C. CHRISTENSEN, Secretary
National Association of Boards of Pharmacy.

Perhaps the title chosen is not exactly right. That is one of the difficulties of choosing a title in advance and then writing the paper later. I intend, more or less, to cover the difficulties involved in the abolition of the assistant pharmacist examination. Therefore, if I wander from the text, please overlook it.

Last January, one of the quiz schools sent out the following publicity, carrying an Indianapolis, Indiana date line:

"At the last session of the State Legislature a bill was passed abolishing the examinations for Assistant Pharmacist and allowing all who were registered assistants to take the examination for full registration, without college graduation. Several states have followed this same procedure, in the past, the object being to get a uniform requirement in all states. Colorado, Utah, and North Dakota are contemplating such action at the next meeting of the legislature and, no doubt, other states, such as Illinois, Wisconsin, West Virginia, Connecticut, North and South Carolina, Delaware, and several others having the assistant grade will probably follow this same procedure."

Upon inquiry, we find that not a single one of these states is even considering the procedure outlined. Apparently this publicity is being sent out with the idea of encouraging this thought in the minds of assistants, thus establishing lobbies for such legislation in the different states, and secondly, with the idea of getting all clerks interested in getting an assistant license as quickly as possible.

The expiration of college exemptions has left the quiz schools with a very limited field of activity. Here then is a new field which promises big dividends—first, a special course for the assistant examination; second, an additional course later for the registered pharmacist examination if the legislative program is accomplished. Please note that the quiz school does **not** suggest the registration of assistants as full registered pharmacists without a **special** examination. The idea of a special board examination to prove fitness has appeal and it is cleverly taken advantage of.

The National Association of Boards of Pharmacy is on record (resolution adopted at Washington, D. C. in 1934) as

opposed to granting the holders of outstanding assistants' licenses any privileges other than those originally conferred by law. This is in the interest of protecting the public welfare.

Certain of the college faculty members (and board members too) have been, shall I say, overzealous about getting rid of the assistant pharmacist. They are to that degree responsible for our present danger. The idea of getting rid of the assistant originated within our own groups; now other groups and the assistants themselves have taken it up and these bills are being presented in the legislature without our own sponsorship and they may get out of control.

We estimate that there are between 10,000 and 15,000 assistants practicing in the United States at present. We have about 8000 students in the colleges of pharmacy who will graduate within the next four years. Do the colleges of the country realize that this assistant group which is clamoring for licenses as registered pharmacists by special legislative act or special board examination is equivalent to from five to seven graduating classes? I think the time has come to face these facts and fight such legislation when presented.

There is no reason, of course, why future examinations for assistants cannot be discontinued without granting special favors in return. Under such a plan, the present assistants would simply continue to practice as such so long as the license is kept active by payment of renewal fees. Eventually, as these men retire, the assistant grade would be a thing of the past. A few states have done this.

Statistics recently compiled by Secretary Baker of the Colorado Board show that 17 states have eliminated the assistant certificate by granting the following favors:

- 2 states automatically made the assistant a registered pharmacist without examination.
- 4 states allowed existing assistants to take the examination for full registration with no restrictions.
- 11 states allowed assistants to take examinations for full registration with time limit.

Some of these states were so eager to get rid of the assistant that they gave him anything he wanted in return. They set the precedent which is now being cited in other state legislatures as a basis for this movement. I personally cannot

understand the reasoning which says that it is better to allow the present assistant to practice as a registered pharmacist (with greater rights) simply to get rid of the title "assistant". That title aptly explains certain limitations and it should be retained for those now holding this form of license.

Wholesale and automatic registration of present assistants would, of course, get rid of the title "assistant pharmacist" if that is worth the risk involved in giving improperly qualified persons such wide privileges. The special examination plan does not eliminate the assistant, however, unless you pass everyone who takes the special examination simply to get rid of assistants. What are you going to do with those who fail? Legally you cannot take away a right once granted, so these men will have to be permitted to practice as assistants—and you will still have assistants. In some states which abolished the assistant examination by the special examination plan, there are still large numbers of assistants practicing, who will continue to do so as long as they desire. Where is the advantage?

Just one word of warning here—I consider this a most dangerous time to introduce legislation in any state abolishing future assistant examinations. The bill may be ever so carefully drafted at time of presentation, but the sentiment of the assistants is sufficiently organized by now to see that such bills are amended to provide for special examinations or automatic registration. Then, what are you going to do? Several states have faced the problem of unemployment among their graduate pharmacists immediately after wholesale registration of assistants, simply because this new class of licensees would go to work for a lower salary. For the time being, we should let this assistant problem rest; if others introduce such bills with unfavorable clauses, they should be fought.

Several states have already reported an increase in the number of candidates taking the assistant examination, simply on the supposition or rumor that it will eventually lead to a license as registered pharmacist without a college degree. In fact, the National Association of Boards of Pharmacy office has received many inquiries to the effect—"Where can I now take the assistant examination so as to be sure of a license as a registered pharmacist later without graduation?"

I have made the suggestion that perhaps we can fight some

of these bills and even enacted laws on the basis of unconstitutionality. Some take the position that the legislature has the right to exempt anyone as it sees fit from requirements. However, I disagree with this view. If we could show that college graduation had been compulsory in a certain state, say from 1922 to the present, and that hundreds had qualified under this law by obtaining a college degree for entrance to examination, and then if we could also show that later a special act had been passed permitting assistant pharmacists who had registered after 1922 and as late as 1935 to take a special examination for license without any college training whatsoever, I believe a court would declare this to be class or discriminative legislation, which is unconstitutional. The job should not be undertaken in a haphazard manner; we would need a very smart lawyer to do it, and we would have to prove beyond a doubt that the inadequate training of the assistants would endanger the public welfare, which the college graduation law seeks to protect. I am not necessarily advocating that this be done, but simply throwing it out as a suggestion to those states that may face this problem in the future in proposed legislation.

This coming winter most of the state legislatures will be in session. I would urge that the colleges and the board in each state make it their business to see that every bill introduced is carefully checked; wherever possible, a copy of all bills affecting pharmacy should be mailed to the National Association of Boards of Pharmacy for checking. We have found in the past that these measures are often slipped in while someone is asleep at the switch. In other words, it is easier to stop them before enactment than to attempt a court test later.

Secretary Baker of Colorado reports splendid response to his questionnaire on the discontinuation of assistant licenses. In fact, all but one state answered. The excellent summary prepared by Mr. Baker is given herewith as this information is of general interest.

Summary

Six (6) states have never provided for assistant: Arkansas, Florida, Georgia, Nebraska, New Mexico, and Washington, D. C.

Twenty (20) states that do provide for assistant and which have not eliminated that grade: California, Colorado, Con-

necticut, Delaware, Idaho, Illinois, Massachusetts, Mississippi, North Carolina, North Dakota, Pennsylvania, Washington, West Virginia, Wisconsin, Wyoming, Louisiana, New Hampshire, Nevada, Oklahoma, Maine.

Twenty-two (22) states that did provide for assistant and which have eliminated assistant pharmacist:

Two (2) states that automatically made the assistant a registered pharmacist without examination: Tennessee, Iowa (Iowa automatically at 21 years of age).

Four (4) states that allowed existing assistants to take registered pharmacist examinations with no restrictions: Kansas, South Carolina, South Dakota, Virginia.

Three (3) states that allowed no examinations for full registered pharmacist by virtue of being an assistant pharmacist: Minnesota, Montana, Vermont.

Eleven (11) states that allowed assistant pharmacist to take full registered pharmacist examinations with time requirement: Alabama, Arizona, Indiana, Kentucky, Maryland, Michigan, New Jersey, New York, Ohio, Oregon, Texas.

Two (2) states that allowed assistant pharmacist to take full registered pharmacist examination with graduation requirement: Missouri, Rhode Island.

One (1) no reply as yet: Utah.

The American Association of Colleges of Pharmacy

Summary of the Proceedings of the 1936 Meeting

(A summary of the proceedings of the 1936 meeting is printed in its entirety because it gives in a brief but concise form every important action of the Association, including recommendations of committees and the disposal made of them. The summary includes the work of the joint session with the national Association of Boards of Pharmacy and the program of the Teachers' Conferences. The papers presented in these conferences will be published in due time. Immediately following the summary are printed the reports of the committees in full and the substance of the more important discussions for those who wish to study details not given in the summary.)

The thirty-seventh annual meeting of the American Association of Colleges of Pharmacy was held at the Adolphus Hotel, Dallas, Texas, August 24 and 25, 1936. One hundred and sixteen representatives from 49 member-colleges were in attendance. Staff members from several non-member colleges in the United States and Canada were present at some of the sessions.

Memorials.

Dean Bradley presented a memorial on the death of Professor Elie H. LaPierre. Three other teachers have passed away during the year: Marshall E. D. Close of Ohio Northern University, W. Bruce Philip of George Washington University, and Antoine E. Greene of Howard University. Tributes will be prepared for them also.

Address of the President.

President Wilson outlined standards of measurement for professional schools and discussed each standard as it related to pharmacy. The address appears in full elsewhere in this issue.

Report of the Secretary-Treasurer.

Secretary Cooper reported a membership of 55 colleges with one in arrears for one year's dues. The balance in the treasury was \$1,249.14.

The report was accepted. The committee appointed to audit the accounts reported that they were correct.

Report of Executive Committee.

Dean Jordan, Chairman of the Executive Committee sub-

mitted the following summary for entering students in member-colleges:

Total number of entering students	2,347
Total number of high school graduates	2,330
Total number of special students	17
Total number with previous college training	669

There was an increase over 1934-35 of 8 per cent, in part due to the addition of one member-college. Comparison with figures for last year showed slight gains in some, slight losses in others.

All member-colleges submitted reports of graduates during the year. A summary of that report indicates:

Number receiving degrees from three-year course (Ph.G. or Ph.C.).....	74
Number receiving degrees from four-year course	1,014
Advanced degrees awarded:	
Master of Science	11
Doctor of Philosophy with major in pharmaceutical subjects	13
Honorary degrees	15
(Master of Pharmacy, 4; Doctor of Pharmacy, 3; Master of Science, 3; Doctor of Science, 5).	

A study of beginning classes for five years seems to indicate an increase in the number of women entering pharmacy, there being 10 per cent last year in member-colleges in the United States. The Committee recommended that a special committee be appointed to study the whole question of women in pharmacy and bring in a report at the next annual meeting. This recommendation was adopted.

The question of whether colleges of pharmacy are turning out more graduates than the profession can absorb has been studied and the Committee is inclined to believe that in general there are not too many, though it is possible that in certain localities more are being graduated than can be taken care of.

Attention was directed to the work of member colleges in making professional contacts with medicine and dentistry in the various states. It is apparent that increased requirements for professional pharmacy have been influential in bringing about better co-operation with other health professions.

Attention was directed to the work accomplished by the American Pharmaceutical Association Committee of which Dean H. Evert Kendig was Chairman. Activity of this Committee helped in the passage of Senate Bill 4390, giving opportunity for commissions for pharmacists in the Medical Corps of the United States Army.

A considerable number of matters was referred to the Executive Committee last year for study and report this year. Following are the recommendations and the action taken:

1. That paragraph 8, Section 6, Article VII of the By-Laws be changed to read: "Credits earned in a standard college, one recognized by the state educational department or by the state university in the state in which it is located, may be accepted for face value in a college of pharmacy in so far as such work applies on the course in pharmacy, but regardless of the amount of credit offered, no student shall be permitted to complete the course in pharmacy in less than three collegiate years in a college of pharmacy; this to become effective for students entering member-colleges on and after January 1, 1938."

2. That a committee of three be appointed to confer with the officers of the N. A. B. P. regarding the time when the one year of practical experience now required can be secured to best advantage.

3. (With reference to a proposal to prepare mimeographed copies of addresses of former presidents) The Committee was in agreement with the spirit of the recommendation and directed that in the future reprints of each presidential address be prepared and sent to each college.

4. That some suggestions dealing with relations with other health professions be referred to the Committee on Professional Relations.

Several matters were referred from the report of the Committee on Relation of Colleges and Boards. They were disposed of as follows:

5. Regarding pharmacists in the army was cared for by passage of S. 4390.

6. (Standards to which drug stores should conform) That this is a matter for joint conference with the National Association of Boards of Pharmacy. The Committee will be glad to confer if requested by that organization to do so.

7. (Approval of efforts to restrict ownership of retail drug stores) The Association was in accord with the spirit of the

recommendation but felt that no legislative or administrative efforts along this line should be approved until the Association has had the opportunity of reviewing the bills or other measures designed to accomplish such results.

8. That the Association re-affirm its stand in behalf of Federal and state food drug legislation which will further protect the consuming public in the matter of foods, drugs and cosmetics.

9. (Minimum equipment for drug stores) Believing this to be a matter for joint conference with the National Association of Boards of Pharmacy, the Committee will be glad to confer with this organization if requested to do so by it.

10. (Opposing the addition of pharmaceutical jurisprudence as a subject demand of the Boards of Pharmacy) Believing this to be a matter for the consideration of the National Association of Pharmacy and not for the American Association of Colleges of Pharmacy, the Committee recommended that no action be taken.

11. That the colleges purchase as many copies of "The Professional Pharmacy" as they can use.

These recommendations were all adopted.

Report of the Syllabus Committee.

Dean Beard presented a report for the Pharmaceutical Syllabus Committee and it was accepted.

Report of the Delegate to the American Council on Education

Dr. Lyman presented a paper concerning the work of the Council and the program of the annual meeting.

The report was accepted.

Report of the Committee on Problems and Plans

Dr. Lyman reported that the following studies have been assigned:

"A Detailed Study of the Extent of the Teaching of Pharmacology in the Colleges of Pharmacy in the United States" by Dr. James M. Dille.

"The Effect of the Four-Year Course on the Calibre of the Pharmacy Students Enrolling in the College of Pharmacy" by Dr. Henry M. Burlage.

"Foreign Educational Requirements for the Practice of Pharmacy" by Professor Ernst T. Stuhr.

"The Trends of Pharmacy" by Dr. L. Wait Rising.

"A Study of Sectional Pharmacy Laws" by Dr. E. V. Lynn.

At Dean Lyman's request, Science News Letter had consented to publish pharmaceutical material under the title of Pharmacy, and pharmaceutical workers were urged to report such information to that publication.

The importance of having the programs of Subsection N2 of the American Association for the Advancement of Pharmacy all that they should be was stressed.

Report of the Committee on Activities of Students and Alumni

Dr. Ireland, Chairman of this Committee made several recommendations, all of which were referred to the Committee on Resolutions.

Reports of Other Standing Committees

Several standing committees had reports containing no recommendations: that of the Committee on Educational and Membership Standards, Dean DuMez, Chairman; Curriculum and Teaching Methods, Dr. Rising, Chairman; Committee on Libraries, Dr. Lee, Chairman.

The report of the Committee on Relation of Boards and Colleges contained no recommendation but following the reading of it, Dean O'Connell, Chairman, directed attention to the fact that some districts are so large that it is not possible to have meetings. He moved that the Association take up with the National Association of Boards of Pharmacy the question of an apportionment which would permit all states to participate in these meetings. The motion was carried.

Dr. W. G. Crockett presented the report of the Committee on Student Branches of the American Pharmaceutical Association and it was accepted. Since the same field is being covered by a committee of the American Pharmaceutical Association, duplication of effort seems unwise and the Committee is not to be reappointed.

Report of the Committee on the Establishment of a Pharmaceutical Corps in the United States Army

Dean Kendig, Chairman of the American Pharmaceutical Association Committee, told about the work of this Committee particularly that leading up to the introduction of S. 4390 by Senator Sheppard and of its enactment into the

law which became effective June 26, 1936. Under its provisions 16 commissioned pharmacists are provided for.

The Committee made several recommendations which were referred to the Committee on Resolutions.

Report of the Committee on Pharmacy Aptitude Tests

Dr. Klemme, Chairman, presented a list of subjects that the committee believes students should be examined in at the time of their matriculation. Tests for English, arithmetic, chemistry and psychology are already available; tests in physiology, hygiene and botany are in preparation.

The Committee made several recommendations which were referred to the Committee on Resolutions.

Report of the Committee on Professional Relations

Professor Schicks, Chairman of this Committee, pointed out how pharmacists and pharmaceutical associations may bring about more cordial relations among members of the health professions.

His recommendation that the Committee be continued was referred to the Committee on Resolutions.

Report of the American Council on Pharmaceutical Education

A tentative draft of standards for the accreditation of colleges of pharmacy was submitted during the year to deans of colleges and secretaries of boards of pharmacy and was revised once before submitting it to the American Pharmaceutical Association Convention. After final revision it is the intention to proceed with the task of making the standards effective. The report was adopted. Following the reading of the report, Dean Jordan pointed out that the council would need money to carry on its work and moved that the Association contribute \$200.00 more toward this expense, provided each of the other organizations represented on the Council contributes a like sum. The motion was carried.

Dean Jordan also directed attention to the contributions made by many of the colleges a few years ago for the purpose of an inspection of colleges. That money has been kept in a separate fund and now amounts to about \$7800.00. If the American Council on Pharmaceutical Education becomes an accrediting agency then the proposed inspection, which has not been made for lack of financial support, will be unnecessary. He moved that this money be made available for the use of the Executive Committee to pay the expense of the

investigation of those colleges that contributed to the fund, (it was pointed out that not all colleges contributed), this to be used, if the Executive Committee feels that it would be necessary to do so, during the present year or hereafter. The motion was carried.

Other Reports

Dr. Youngken, reporter on Biological Abstracts, gave the status of that publication. Other reports were made by Dr. Jenkins, Chairman of representatives to the National Conference on Pharmaceutical Research; Dean Briggs for the National Drug Trade Conference; Dr. Olsen for the Druggists' Research Bureau; Dean Dye as representative to the National Association of Retail Druggists' convention.

At the 1935 meeting, the Colleges and the Boards in joint session authorized the establishment of a joint Committee to Study the Examinations of both colleges and boards. The Association of Colleges ratified this action and President Wilson appointed Dean O'Connell as the Association's member. The National Association of Boards of Pharmacy did not ratify the action of the joint session so there was no committee to function. Dean O'Connell's explanation was accepted as his report.

Report of the Committee on Resolutions

From the Committee on Professional Relations:

That the Committee be continued in order that the good work now begun need not be dropped.

The recommendation was adopted.

From the Committee on Activities of Students and Alumni:

A plan for providing speakers for student groups and a recommendation that student organizations make efforts to obtain time on programs of state pharmaceutical associations was approved in spirit but the elaborate setup seemed hardly justified. Colleges were urged to voluntarily cooperate in such activities.

"That colleges act in accordance with recommendation three (that colleges study short courses) in so far as conditions in the various districts make such procedure advisable"; that this project be given further study and consideration by the Committee.

These recommendations were adopted.

From the Committee on Pharmacy Aptitude Tests:

"1. That the Committee, with the same or different membership, be continued for a period of not less than four years to carry this study to a logical condition".

The recommendation was adopted.

"2. That aptitude tests in English, arithmetic, biology, chemistry and psychology be applied in the member colleges at the earliest practicable time, and that the result of the tests be transmitted to the Committee for permanent record and study" (it being understood that participation is voluntary, not compulsory).

The recommendation was adopted.

"3. (a) That the Association appropriate funds necessary to finance the Administration of these examinations or

"(b) That such member colleges as desire to join in the study signify their willingness to carry that burden themselves".

The second part of this recommendation was approved by the committee and adopted by the Association.

"4. That such schools as enter into the study agree to carry it out for a period of four years and that a close check-up of their graduates who have undergone this test be made so it will be possible for the committee to report later on the validity of the test".

This recommendation was adopted.

From the Committee on Establishment of a Pharmaceutical Corps in the United States Army:

"1. That the Committee be continued.

"2. That the name be changed to the Committee on Status of Pharmacists in the Government Service.

"3. That it be made a standing committee of the Association.

"4. That through arrangement with the American Pharmaceutical Association, the Committee members be appointed as members of the corresponding committee of that Association and function therein so that one committee can represent and speak for organized pharmacy about the status of pharmacists in the government service.

"5. That it be instructed to continue its efforts to improve the pharmaceutical service in the Federal and state govern-

ments and thereby obtain for pharmacy the recognition and status to which it is entitled".

All these recommendations were adopted.

From the Committee on Problems and Plans:

"That the Executive Committee be authorized to establish a quarterly journal to be called the American Journal of Pharmaceutical Education and to appoint an editor, editorial board and collaborators as may seem wise, to make such contracts as are necessary to carry out all details that may arise in connection with the establishment and publication of said journal".

The Committee on Resolutions recommended "that this recommendation be referred to the Executive Committee of the American Association of Colleges of Pharmacy for consideration and recommendation after consultation with the editor of the Journal of the American Pharmaceutical Association if this be deemed advisable. In case this recommendation is not satisfactory to Dean Lyman, the Committee is quite willing to withdraw its recommendation and allow him to personally present his recommendation for consideration."

After discussion, the recommendation of the Committee on Problems and Plans was referred to the Executive Committee with power to act.

The final recommendation of the Committee on Resolutions was "that the American Association of Colleges of Pharmacy express its appreciation of the scholarly address presented before our Association by President Caldwell of the University of Georgia and that the Secretary thank President Caldwell for his presence and his splendid contribution".

This recommendation was adopted and the report of the Committee on Resolutions as a whole was adopted.

Papers

Dean Beard presented a paper on "The Danger in the Present Two-Year Time Requirement in a School of Pharmacy, for Graduation from Association Colleges".

Following the reading of his paper, Dean Beard moved that the Association vote immediately on the recommendation of the Executive Committee, that three collegiate years in a college of pharmacy be required for completion of the course in pharmacy regardless of the amount of credit offered. After considerable discussion the recommendation was adopted.

A paper by Dean Wulling and Dr. Douglass on "The Scientific Approach to Problems of Admissions and Guidance in the College of Pharmacy" was presented in abstract by Dean Jordan.

Annual Dinner

The guest speaker at the annual dinner was President Harmon W. Caldwell of the University of Georgia. He was introduced by Dean Wilson and Dean Lyman made the response following the address.

Officers for 1936-1937

President: Theodore J. Bradley, Boston, Massachusetts
 Vice-President: William G. Crockett, Richmond, Virginia
 Secretary-Treasurer: Zada M. Cooper, Iowa City, Iowa
 Chairman of the Executive Committee: Ernest Little, Newark, New Jersey

Members of Executive Committee(to serve two years:
 Andrew G. Dumez, Baltimore, Maryland; Robert C. Wilson, Athens, Georgia

Member of the Executive Committee (to serve one year—the unexpired term of Dean Little): Charles B. Jordan, Lafayette, Indiana

Member of the Syllabus Committee: Eldin V. Lynn, Boston, Massachusetts.

Joint Session

The report of the Fairchild Scholarship Committee was presented by Dr. Eberle, Chairman. The winner was Benjamin Philip Hecht, a graduate of the Massachusetts College of Pharmacy.

"What Legal Difficulties May We Get into When We Abolish Assistant Registration" was discussed by Secretary Christensen of the National Association of Boards of Pharmacy.

"Should We Have a Distinctive Degree for the Completion of the Four-Year Course" was discussed by Mr. Winne for the Boards and by Dean Little for the Colleges.

It was agreed that a committee of four, made up of two representatives of the National Association of Boards of Pharmacy and two representatives of the American Association of Colleges of Pharmacy, be appointed as a committee of four to give this matter further study and report. (This action was ratified by the American Association of Colleges of Pharmacy and Deans Jordan and Little were appointed.)

Conference of Teachers of Pharmacy

Dean Motley presided and the following papers were presented and discussed:

"Teaching Laboratory with the Beginning Pharmacy Course", Ina Griffith.

"A Study of Pharmacy Technique", H. George DeKay.

Officers elected for the ensuing year were Dr. Lee, Chairman; Dean Hammond, Vice-Chairman; Dr. Rising, Secretary.

Conference of Teachers of Chemistry

Dr. Uhl presided and the following papers were presented and discussed:

"The Use of Chemistry in Teaching Plant Extractives", Loyd E. Harris.

"Newer Ideas in Teaching a First Course", Eldin V. Lynn.

"The Application of Objective Examinations in Elementary Organic Chemistry", Carl J. Klemme and J. H. Hunter.

Officers elected for the ensuing year were Professor Britt, Chairman; Dr. Powers, Secretary.

Conference of Teachers of Pharmacognosy and Pharmacology

In the absence of the Chairman, Dean Mollett, Dr. Youngken presided.

The following papers were presented and discussed.

"A List of Vegetable Drugs for a Course in Pharmacognosy", Kenneth Redman.

"Class Background Studies—A Survey of Some of the Ways Used by Students Attending a College of Pharmacy and Science in Solving the Money Problems", Marin S. Dunn.

"Preliminary Chemical Investigation of the Berries of *Rhus Glabra* Linne", G. H. McFadden and R. L. McMurray.

"Biographical Notes on Teachers of Pharmacognosy", Ralph D. Bienfang.

"Cultivation of Ephedra", Lovell D. Hiner.

In addition to these, two papers were read by title:

"Drug Collection and Cultivation in Mississippi", W. W. Barkley.

"General or Pharmaceutical Botany for Pharmacy Students", Lovell D. Hiner.

Dr. B. V. Christensen made a brief verbal report about "Crude Drug Imports".

Officers elected for the ensuing year were as follows: Chairman, Dr. Bienfang; Secretary, Dr. Goodrich.

Conference of Teachers of Pharmaceutical Economics

Dean McCloskey presided. Two papers were presented:

"What is a Shelf Warmer?", Paul C. Olsen.

"Price Stabilization", Robert W. Rodman.

The following officers were elected for the ensuing year:
Chairman, Dean Rivard; Secretary, Dr. Clark.

Zada M. Cooper, Secretary.

Approved: Ernest Little, Chairman Executive Committee.

Special Appointments and Reports of Committees

President Wilson made the following temporary appointments:

Chaplain

Dean Gordon L. Curry

Committee on Resolutions

Ernest Little, Chairman

Glenn L. Jenkins

William G. Crockett

Committee on Nominations

Rufus A. Lyman, Chairman

J. G. Beard

Hugh C. Muldoon

Auditing Committee

L. Wait Rising, Chairman

Leon W. Richards

Justin L. Powers

Vice President Homer C. Washburn was absent because of sickness and Dean Antoine O. Mickelsen who was vice-president in 1935 was asked to serve as such during the current meeting.

Report of Secretary-Treasurer

The usual summary of proceedings of the last meeting was prepared and copies mailed to deans of member-colleges and pharmaceutical journals as soon as possible after the reporter's transcript was received.

Five hundred and ten copies of the Proceedings were printed and 490 of them have been distributed. Each member-college was provided with five copies, the remainder going to

secretaries of state boards and to secretaries of state and national associations, to librarians and a number of individuals.

Thirty copies of earlier volumes were sent out and there have been requests for copies that could not be supplied. The first ten years are exhausted. If member-colleges have duplicates of these years, that they care to part with, some of these wants could be supplied.

One college is in arrears for one year's dues.

The balance in the treasury is \$1,249.14. In addition to this balance there is one state bond of \$100.00 received several years ago in payment of dues.

The fund collected for the Study of Pharmacy several years ago amounts to \$7,885.50, \$7,000.00 in government bonds, the remainder in a savings account.

Financial Statement, 1935-1936

BALANCE AND RECEIPTS

1935	
Aug. 7	Balance on hand (Cash \$953.08 and state bond \$100.00)\$1,053.08
Sept. 20	Detroit Institute of Technology, College of Pharmacy and Chemistry, annual dues for 1934-35..... 50.00
" 21	Temple University, School of Pharmacy, annual dues 50.00
" 23	Rhode Island College of Pharmacy and Allied Sciences, annual dues 50.00
" 24	North Dakota State Agricultural College, School of Pharmacy, annual dues 50.00
" 25	Rutgers University, The State University of New Jersey, New Jersey College of Pharmacy, annual dues 50.00
Oct. 1	University of Minnesota, College of Pharmacy, annual dues 50.00
" 3	Ohio Northern University, College of Pharmacy, annual dues 50.00
" 3	George Washington University, School of Pharmacy, annual dues 50.00
" 3	University of Mississippi, School of Pharmacy, annual dues 50.00
" 4	State University of Iowa, College of Pharmacy, annual dues 50.00
" 5	Purdue University, School of Pharmacy, annual dues 50.00
" 5	University of Michigan, College of Pharmacy, annual dues 50.00
" 7	Alabama Polytechnic Institute, School of Chemistry and Pharmacy, annual dues 50.00
" 9	St. Louis College of Pharmacy, annual dues..... 50.00

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"	9	University of Pittsburgh, Pittsburgh College of Pharmacy, annual dues	50.00
"	9	University of Maryland, School of Pharmacy, annual dues	50.00
"	10	University of Illinois, College of Pharmacy, annual dues	50.00
"	10	University of Notre Dame, Department of Pharmacy, annual dues	50.00
"	11	Philadelphia College of Pharmacy and Science, annual dues	50.00
"	11	Western Reserve University, School of Pharmacy, annual dues	50.00
"	12	Indianapolis College of Pharmacy, annual dues.....	50.00
"	15	Oregon State Agricultural College, School of Pharmacy, annual dues	50.00
"	16	Louisville College of Pharmacy, annual dues.....	50.00
"	16	Medical College of Virginia, School of Pharmacy, annual dues	50.00
"	17	Creighton University, College of Pharmacy, annual dues	50.00
"	18	Connecticut College of Pharmacy, membership fee and annual dues	75.00
"	18	Massachusetts College of Pharmacy, annual dues.....	50.00
"	21	University of Nebraska, College of Pharmacy, annual dues	50.00
"	23	University of Puerto Rico, College of Pharmacy, annual dues	50.00
"	25	University of Oklahoma, School of Pharmacy, annual dues	50.00
"	28	University of Colorado, College of Pharmacy, annual dues	50.00
"	31	Loyola University, New Orleans College of Pharmacy, annual dues	50.00
Nov.	1	State College of Washington, School of Pharmacy, annual dues	50.00
"	9	University of Washington, College of Pharmacy, annual dues	50.00
"	14	University of Kansas, School of Pharmacy, annual dues	50.00
"	21	Duquesne University, School of Pharmacy, annual dues	50.00
"	27	South Dakota State College, Division of Pharmacy, annual dues	50.00
"	29	Howard University, College of Pharmacy, annual dues	50.00
"	30	University of Florida, School of Pharmacy, annual dues	50.00
Dec.	10	Farmers' Loan and Trust Co., portion of fourth dividend (remainder in savings account).....	70.45

FINANCIAL STATEMENT, 1935-1936

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"	14	West Virginia University, Department of Pharmacy, annual dues	50.00
"	14	Iowa City Savings Bank, portion of third dividend (remainder in savings account)	5.00
"	18	University of Southern California, College of Pharmacy, annual dues	50.00
Jan.	6	University of Philippines, College of Pharmacy, annual dues	50.00
"	17	University of South Carolina, School of Pharmacy, annual dues	50.00
"	23	Wayne University, College of Pharmacy, annual dues	50.00
"	31	National Association of Boards of Pharmacy, share of expense of reporting joint session	25.30
Feb.	17	University of Tennessee, School of Pharmacy, annual dues	50.00
"	18	Earl Mann, one copy of Proceedings	1.68
"	21	University of Wisconsin, Course in Pharmacy, annual dues	50.00
"	24	Xavier University, College of Pharmacy, annual dues	50.00
Mar.	5	State University of Montana, School of Pharmacy, annual dues	50.00
"	9	Rutgers University, New Jersey College of Pharmacy, 20 copies Proceedings	33.00
"	9	North Pacific College of Oregon, School of Pharmacy, annual dues	50.00
"	12	University of Idaho, Southern Branch, College of Pharmacy, annual dues	50.00
"	14	University of Georgia, School of Pharmacy, annual dues	50.00
May	19	Ohio State University, College of Pharmacy, annual dues	50.00
July	1	First Capital National Bank, interest on Alabama bond (minus 20c exchange)	4.80
"	1	Valparaiso University, College of Pharmacy, annual dues	50.00
"	16	University of North Carolina, School of Pharmacy, annual dues	50.00
"	18	University of Texas, College of Pharmacy, annual dues	50.00
			<hr/>
			\$3,968.31

DISBURSEMENTS AND BALANCE

1935			
Aug.	6	Charles O. Lee, for multigraphing	5.00
"	7	Charles W. Johnson, dinner for speaker and wife and telephone call	3.75
"	29	Charles B. Jordan, expense of attending annual meeting (\$174.92) and telegrams (\$3.96)	177.88
Sept.	3	Zada M. Cooper, for stamps	25.00
"	4	Zada M. Cooper, expense of attending annual meeting	143.08

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"	5	The Master Reporting Co., reporting convention sessions, including joint session and teachers' conferences	311.64
"	10	Charles B. Jordan, for stamps.....	10.00
"	23	Edward H. Lauer, expenses to convention.....	29.75
Oct.	1	First Capital National Bank, notary fees.....	1.50
"	1	Economy Advertising Co., stationery.....	20.40
"	8	State University of Iowa, multigraphing Summary of Proceedings	8.58
"	8	Irma Phend, typing	9.40
"	14	National Conference on Pharmaceutical Research.....	25.00
Nov.	1	First Capital National Bank, notary fees.....	1.00
Dec.	2	First Capital National Bank, notary fee.....	.25
"	3	First Capital National Bank, rental on safety deposit box for 1935-36	2.20
"	11	J. Lester Hayman, expenses in attending meeting of N. D. T. C.	21.94
"	12	W. W. Rudd, expenses in attending N. D. T. C.	14.00
Jan.	1	First Capital National Bank, exchange on check and notary fee35
"	6	Economy Advertising Co., 4 zinc plates for use in Proceedings	18.73
"	6	Morrison and Parsons, renewal of bond for secretary-treasurer	25.00
"	28	Economy Advertising Co., 400 labels.....	2.55
"	28	Zada M. Cooper, for stamps.....	10.00
"	31	Economy Advertising Co., 1 ream paper.....	.72
Feb.	1	First Capital National Bank, notary fees.....	.50
"	17	The Economy Advertising Co., 510 copies of Proceedings (\$792.50) and sales tax (\$15.85).....	808.35
"	17	The Economy Advertising Co., express and postage on Proceedings	23.08
Mar.	2	First Capital National Bank, notary fees.....	.50
"	4	Charles B. Jordan, expense of attending district meeting of the American Council on Education.....	12.00
"	4	Charles B. Jordan, for stamps.....	10.00
"	4	American Council on Education, dues for 1936-37.....	100.00
Apr.	7	Robert C. Wilson, expense in attending meeting of District No. 4	64.69
"	16	Journal of the American Pharmaceutical Association, annual contribution	300.00
May	11	Rufus A. Lyman, expense as delegate to American Council on Education	96.58
June	6	Bursar, National Research Council, annual contribution to Committee on Pharmacognosy and Pharmaceutical Botany	25.00
"	15	Charles B. Jordan, to correct error in his bill of Aug. 29	1.00
July	3	Zada M. Cooper, for stamps.....	5.00
"	3	Irma Phend, typing	38.70
"	3	Charles B. Jordan, expenses of trip to Washington to attend meeting to assist Surgeon General's office in arranging regulations for pharmacists' examinations	61.05

FINANCIAL STATEMENT, 1935-1936

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" 14	First Capital National Bank, coupons on Alabama bond returned	5.00
Aug. 1	Charles B. Jordan, honorarium as Chairman of Executive Committee	100.00
" 17	Zada M. Cooper, honorarium as Secretary-Treasurer	100.00
	Total expenditures	2,619.17
" 24	Cash on hand	1,249.14
" 24	One state bond	100.00
		<hr/> \$3,968.31

SUMMARY OF RECEIPTS

Cash on hand	\$ 953.08
One state bond	100.00
Membership fee from one college	25.00
Dues from 55 member-colleges	2,750.00
National Association of Boards of Pharmacy share in reporting joint session	25.30
Interest	4.80
Proceedings	34.68
Dividends from closed banks	75.45
	<hr/> \$3,968.31

SUMMARY OF DISBURSEMENTS

Reporting 1935 convention, including four teachers' conferences and the joint session	\$ 311.64
Printing 510 copies of Proceedings	808.35
Contributions	325.00
Dues to various organizations	125.00
Expenses of representatives to various meetings	270.26
Expenses of Chairman of Executive Committee to convention	178.88
Expenses of Secretary-Treasurer to convention	143.08
Stationery and office supplies	23.67
Postage and express charges	83.08
Stenographic and clerical expense	48.10
Multigraphing	13.58
Bond for Secretary-Treasurer	25.00
Honoraria	200.00
Miscellaneous	63.53
	<hr/> \$2,619.17

Respectfully submitted,
Zada M. Cooper,
Secretary-Treasurer.

Report of the Executive Committee

The Executive Committee begs to submit the following report: All colleges holding membership in the Association have submitted the report on entering students as required by the By-Laws of the Association. The summary of that report follows:

- Total number of entering students—2347
- Total number of high school graduates—2330
- Total number of special students—17
- Total number of students with previous college training—669.

Last year it was reported that there was a total of 2174 entering students for the year 1934-35. Therefore, there was an increase this year of 173, or 8 per cent. This increase seemed to be pretty well distributed over the colleges holding membership in the Association with no pronounced increase in any one case. The Connecticut College of Pharmacy was admitted to membership last year and part of the increase is due to the number of freshmen entering this institution. A check on last year's enrollment indicates that there was a gain in twenty-nine colleges, a loss in twenty-one colleges, and no change in three colleges. This makes it clear that the average gain or loss in any one institution was not great.

All the colleges holding membership in the Association have submitted the report required by Article VII of the By-laws on the number of students graduated this past collegiate year. A summary of that report shows—

Total number graduated in the three-year course (Ph.C. or Ph.G.)—74.

Total number of graduates from the four-year course—1014.

Advanced degrees:

Master of Science—11.

Doctor of Philosophy with major in pharmaceutical subjects—15.

Honorary degrees—15.

(Master of Pharmacy 4, Doctor of Pharmacy 3,
Master of Science 3, Doctor of Science 5).

The Chairman has had his attention called to the fact that there is an increasing number of women entering phar-

macy. Therefore, the lists of all entering students were carefully examined and the number of women noted. The Chairman went back over the reports of entering students from 1931 in order to determine the total number entered and the number and percent of these that were women. The result is tabulated below.

Report of Number of Women entering Pharmacy for the Years 1931-36:

In 1931, 194 women in a total of 2788, or 6.95%

In 1932, 234 women in a total of 1780, or 13.1%

In 1933, 245 women in a total of 1902, or 12.9%

In 1934, 182 women in a total of 2174, or 8.4%

In 1935, 516 women in a total of 2347, or 13.5%

Of the 316 women entering this year, 76 entered the University of Puerto Rico and the University of the Philippines Colleges of Pharmacy. Eliminating these two schools, the total number of women entering member-colleges in the United States this year was 240, or a little over 10 percent. I think two or three conclusions can be drawn from this study:

1. The percentage of women entering pharmacy in the Philippines and Puerto Rico is very much larger than the percentage entering in the states.

2. The percentage of women entering pharmacy in the member-colleges of the United States is increasing.

3. The problem involved in placing these women when they graduate will not be a simple one, and the deans of our member-colleges should begin to consider ways and means of making more positions available for women in pharmacy. I believe we all agree that pharmacy is a profession in which women can very well take the place of men, except perhaps in the heavier work connected with a commercial store. However, in most stores this heavier work is done by a janitor, so that objection is not valid. We may question the wisdom of women entering pharmacy, but when they apply for admission we cannot refuse if they meet our entrance requirements.

It has been the experience of the Chairman and deans of some colleges of pharmacy that the average retail pharmacist is not yet ready to employ women as registered pharmacists in a measure compatible with their ability to serve. One chain operator said to me that he could not use women for the reason that every other night each registered phar-

macist would be expected to close the store and sometimes the stores would not close until eleven or twelve o'clock at night. He believed there would be complaints from the citizens of the towns in which he operated if a woman was in charge up to that late hour. I have been informed that there is a law in New York State that prohibits women from working in retail establishments after 9 P. M.

I think our problem of placing women in pharmacy is a matter of education and there is a possibility that the Association can assist in opening more opportunities to women by a campaign urging retail pharmacists to consider them for positions in their stores. It is possible that this problem of women in pharmacy has not come to the attention of many of the deans holding membership in this Association. However, I know that it is a problem because papers have been presented at our district meetings indicating that some member-colleges are faced with the problem. In a study of the women entering pharmacy it is to be noted that there seems to be a larger percent of them entering the colleges of pharmacy in the northwest. The deans of these colleges may be helpful in the solving of the problem. Perhaps the time is not ripe for a more serious consideration of this problem. The Association may wish to discourage women entering pharmacy or it may wish to encourage them. We believe this question should be studied, therefore, the Executive Committee recommends that a special committee be appointed to study this whole question and bring in a report at the next annual meeting. If this recommendation is adopted the Committee should be instructed to study the question from the following angles: First, the number of women entering pharmacy; second, the adaptability of women in the profession of pharmacy; and, third, what attitude should the Association take towards this question.

The past year seems to have been a very satisfactory one for pharmaceutical education. It is true that considerable has been printed in our pharmaceutical journals on the question of whether colleges of pharmacy are turning out too many graduates, that is, more than the profession can absorb. If we are graduating more than the profession can absorb, this is a problem that should receive our very careful, serious thought. The Committee is inclined to believe that in general we are not graduating more than the profession needs.

However, it is possible that in certain places in the United States the colleges are graduating an oversupply. This whole question is being studied by the American Pharmaceutical Association through the cooperation of the American Association of Colleges of Pharmacy and the National Association of Boards of Pharmacy, and practically a whole session of the American Pharmaceutical Association will be devoted to the subject. During the year the Secretary of the American Pharmaceutical Association, the Secretary of the National Association of Boards of Pharmacy and the Chairman of the Executive Committee have been securing data which we believe will be very helpful in arriving at some conclusion regarding this problem. All of this data will be presented at the above mentioned session of the American Pharmaceutical Association. The Chairman has a summary of his report which may be of some value to you in giving consideration to this problem prior to the above mentioned session. The summary is as follows: (See Summary Sheet Page 70).

I believe that we will all agree that there is a sufficient number of colleges of pharmacy in the United States to train all the pharmacists necessary for the profession. In fact, I think most of us believe that it would be wise if several of the colleges of pharmacy would unite, thus eliminating especially some of the smaller colleges and making institutions of greater strength because of greater numbers. The Executive Committee is considerably disturbed because there has been organized during the past few months a new college of pharmacy in Kansas City known as the Missouri College of Pharmacy and Chemistry. The bulletin issued by this beginning institution would indicate that it is to be a high-class, reputable college of pharmacy. However, no list of faculty is given in the bulletin and circulars from the institution are signed by the "Secretary to the Dean", and the "Dean" is not named. The Committee believes that there is no need for another college of pharmacy in the State of Missouri and the opening of this institution cannot therefore be considered a good thing for our professional education. Rumors have also come to the Chairman of the organization of another college of pharmacy in the State of Michigan, but these rumors are without foundation.

Survey of the Graduates of Colleges of Pharmacy in the United States During the Years 1931-1936

Based on Number For Which Accurate Data Was Given.

1	2	3	4	5	6	7
Total No. of Graduates	No. and % of total for which accurate data was furnished.	No. and % of Grads. employed in retail pharmacy.	No. and % of Grads. employed in other pharmaceutical lines.	No. and % of Grads. employed outside of pharmacy.	No. and % of Grads. unemployed.	No. and % of Grads. unemployable (Death, married women, illness, etc.)
2943 1931 (100%)	1723 (58.5%)	1335 (77.5%)	143 (8.9%)	161 (9.3%)	38 (2.2%)	51 (3%)
2751 1932 (93.3%)	1690 (61.1%)	1367 (80.78%)	122 (7.2%)	121 (7.2%)	36 (2.2%)	44 (2.7%)
2274 1933 (76.3%)	1387 (60%)	1128 (81.3%)	95 (6.85%)	113 (8.1%)	27 (1.9%)	23 (1.6%)
2333 1934 (79.6%)	1540 (66%)	1218 (79.9%)	115 (7.47%)	113 (7.34%)	50 (3.24%)	16 (1.04%)
1295 1935 (44%)	843 (65.1%)	657 (78%)	73 (8.66%)	68 (8.06%)	22 (2.6%)	9 (1.67%)
1572 1936 (53.4%)						

The Association will, of course, remember that in 1925 we eliminated the two-year course and in 1932 we eliminated the three-year course. Therefore, the graduating class of this year, except in a few instances, ought to be composed of students who have completed their baccalaureate work. From time to time there has been advocated by member-deans the requirement of a pre-pharmacy year with the continuation of four years of professional work, making a total of five years for graduation. There seems to be at present a much greater interest in this pre-pharmacy year and the extension of our work to five years than ever before. In fact, I believe one state association has recommended that the course be extended to five years. We speak of this to call your attention to the fact that this is a subject which will come before the Association with greater emphasis in the next few years and the faculties of our member-colleges should be giving it very careful consideration.

The Executive Committee believes that the increased requirements for professional pharmacy have been very influential in attracting the attention of our sister health professions of medicine and dentistry to the profession of pharmacy. The active cooperation of medicine, dentistry and pharmacy in our several states is increasing. This has been brought about by the member-colleges, American Pharmaceutical Association, and the several state pharmaceutical associations. We are indeed pleased to commend the activity of several state pharmaceutical associations and colleges of pharmacy in helping to bring about better understanding and cooperation with medicine and dentistry. The Indiana Pharmaceutical Association made contact with the medical and dental associations and created a Contact Committee several years ago. Through the activities of this committee and with the assistance of colleges of pharmacy in the state, exhibits and demonstrations have been presented at the annual meeting of the medical and dental associations of the state. The efforts of the contact committee enforced by the assistance of the colleges of pharmacy have been more than rapid as we find the physicians and dentists much interested. At the last Indiana State Dental Association meeting a contact committee was appointed for the purpose of bringing about better relationships between the three professions. We feel that the efforts of the colleges of pharmacy are responsible for the appointing of this contact committee. Without doubt

greater activities along this line have been manifested in other states. Without stealing the material of Dean Schicks, who is chairman of the Committee on Dental Relationships and who will report to you later, the Executive Committee wishes to commend the activities of the Maryland Pharmaceutical Association and especially the College of Pharmacy of the University of Maryland for the very excellent effort that has been made in that State during recent times. Again it is possible that other states are even more active, but the Executive Committee is uninformed on the point.

The Committee wishes to commend especially the work of the American Pharmaceutical Committee on the Establishment of a Pharmaceutical Corps in the United States Army of which Dean Kendig is chairman. As a result of the activity of the American Pharmaceutical Association, Senate Bill 4390 was passed giving opportunities for commissions for pharmacists in the Medical Corps. There are at present vacancies for nine and during the early fall the Surgeon General's office will announce examinations for these positions. The Chairman was called to Washington by Secretary Kelly of the American Pharmaceutical Association and asked to assist in advising the Surgeon General's office regarding the formulation of rules and regulations to govern the selection of these officers for commissions and to submit to the Surgeon General's office questions from which his office could prepare the examination. I believe the American Pharmaceutical Association is to be especially commended for securing the passage of this bill; especially should Secretary Kelly and Editor Eberle receive commendation for their efforts along this line. At last pharmacy has secured recognition in the Army. It is true that not all that we asked for has been secured, but if the men who are commissioned in accordance with this bill will prove of value to the Medical Corps of the Army, there can be no question but that pharmacy will receive greater recognition.

It behooves pharmacy to place its best men forward for these positions. For years we have asked for recognition. If we now fail to send good men into the Medical Corps of the Army, all our efforts will be in vain. Therefore, the Executive Committee urges most emphatically that the dean of every college of pharmacy holding membership in the Association urge their best men to try for commissions in the Medical Corps of the Army. Our efforts along this line

will spell success or failure for that much-sought-for recognition of pharmacy in the Army.

Without doubt the member-colleges have been following rather closely the fate of the Food and Drug Bill, S. 5, and know that when it reached the House of Representatives it was referred to a special committee and that because of rush of business it was shelved for a while, and finally a number of hearings were held on it by a special committee of the House. This committee brought in a report recommending several changes. It was passed by the House, but the House and Senate failed to agree on the changes and no action was taken on the bill before the adjournment of Congress. It is of interest to know that one of the chief bones of contention was whether the Food and Drug Administration or the Federal Trade Commission should have charge of the enforcement of the provisions regarding the control of advertising. The Committee on Food and Drug Legislation has not been in position to do much during the year. However, individual members of this Association have appeared before a great many local groups such as the League of Women Voters, parent-teachers' associations, luncheon clubs, etc., and argued for the passage of a sane and effective food and drug bill. We believe that our efforts have been of value and that eventually Congress will pass a much needed revision or a new food and drug bill.

Last year a considerable number of recommendations were referred to the Executive Committee.

1. There was lively debate as to whether we should require two-year, three-year or four-year enrollment in a college of pharmacy for every student regardless of the credits presented. A student might be a graduate of a school of science or even have a Ph.D. or M.D. degree. How long should he be required to be registered in a college of pharmacy? The present requirement is "at least two years" and it was put into the By-Laws, upon recommendation of the Executive Committee, for the **sole purpose** of handling special cases. As it turned out, apparently, some of the colleges are making it a general rule, which was not the intention when the provision was adopted.

The Committee has made a careful study of the question and recommends that paragraph 8 of Section 6, Article VII be changed to read:

"Credits earned in a standard college, one recognized by the state educational department or by the state university in the state in which it is located, may be accepted for face value in a college of pharmacy in so far as such work applies on the course in pharmacy, but regardless of amount of credit offered, no student will be permitted to complete the course in pharmacy in less than three collegiate years in a college of pharmacy, this to become effective for students entering member-colleges on and after January first, 1938."

2. Some recommendations contained in Dean Little's presidential address last year were referred to the Executive Committee. The first of these asked that a study be made of the time required for practical experience and the time **when** that practical experience can be acquired to the best advantage, that is between college years or after college. There is distinct agreement between the National Association of Boards of Pharmacy and this Association that only one year should be required but the Executive Committee gave careful study to the question of **when** it should be acquired and now makes this recommendation:

"That a committee of three be appointed to confer with the officers of the National Association of Boards of Pharmacy regarding the time **when** the one year of practical experience, now required, can be secured to the best advantage."

3. Dean Little recommended that mimeographed copies of all presidential addresses in the past be made available to member-colleges. The Executive Committee approved the spirit of the recommendation but believes funds are insufficient to do this at the present time. The Committee instructed the Secretary to have reprints made of each presidential address in the future and send one to each member-college as soon after the annual meeting as it is feasible to do so.

4. Another recommendation from Dean Little's address had to do with relations with other health professions. The Committee believes that the Committee on Professional Relations can handle these matters and therefore refers them to that Committee.

Several recommendations contained in the report of the General Chairman of the Committee on Relation of Boards and Colleges, Dean D. B. R. Johnson, were referred to the Executive Committee.

5. The first one, having to do with contacting congressmen in favor of an "Army pharmacy bill" has been cared for, for the present at least, by Senate Bill 4390, therefore the Committee recommends that no action be taken.

6. The next resolution reads as follows: "Resolved, that following the suggestion of Chairman Woodside, a committee shall be named to study the advisability and legality of setting up standards to which all drug stores must conform, if practical experience obtained in them is to be accepted as one of the requirements of registration". The Executive Committee believes that this is a matter for joint conference with the National Association of Boards of Pharmacy and the Committee will be glad to have a conference on this matter if requested to do so by the National Association of Boards of Pharmacy.

7. The third recommendation asks approval of all legislative or administrative efforts to restrict the ownership or management of retail drug stores to registered pharmacists. The Executive Committee approved the spirit but felt that no legislative or administrative efforts along this line should be approved until they have been carefully studied by the Association.

8. The fourth recommendation is that the Association reaffirm its stand in behalf of Federal and state food and drug legislation. That was done last year but the Committee sees no reason for not doing it again and so recommends.

9. The fifth recommendation is "Resolved, that the Association approve Chairman Woodside's suggestion that an effort be made to correlate the programs of the various district meetings, especially with reference to the major theme of discussion, and that the matter be referred to the National Association of Boards of Pharmacy and the American Association of Colleges of Pharmacy so that a workable plan may be evolved". The Committee recommends that this resolution be referred to the General Chairman of the Committee on Relation of Boards and Colleges.

10. The sixth recommendation reads as follows: "Resolved, that we endorse the plan outlined in Edward J. Murphy's paper on 'Minimum Requirements in Technical Equipment for Pharmacies' and that we endorse the list included in the report of the Committee on Minimum Equipment for Phar-

macies of the National Association of Boards of Pharmacy of which Mr. A. C. Taylor was chairman and that the Committee be urged to prepare a second list containing desirable additional equipment.

"Resolved, further that all pharmacies be furnished some form of certificate of approval, acceptable to boards of pharmacy which will indicate that the inspector has found that the above requirement has been met; and that timely ethical publicity be given this type of endorsement to the end that the public will look for the evidence of such endorsement and the pharmacist will seek to have it. It is recommended that a pharmacy which does not have the minimum equipment to meet the requirement and get the inspector's endorsement be allowed to open for business".

The Executive Committee believes that these are matters for joint conference with the National Association of Boards of Pharmacy and the Committee will be glad to have such Conference if requested to do so by that Association.

11. Finally, this resolution: "That we endorse in principle the Christensen paper opposing the addition of pharmaceutical jurisprudence to the obligatory subjects to be included in board examinations".

Believing this to be a matter for the consideration of the National Association of Boards of Pharmacy and not for the American Association of Colleges of Pharmacy, the Executive Committee recommends that no action be taken.

12. As Chairman of the Executive Committee, I was asked to help support the distribution of a very fine book, "The Professional Pharmacy" prepared by Mr. Delgado. The Executive Committee believes that this effort should be supported and therefore recommends that the member-colleges purchase as many copies of "The Professional Pharmacy" as they can make use of in their instructional work".

Respectfully submitted,

Charles B. Jordan,

Chairman.

Report of the Delegate to the American Council on Education.

THE WORK OF THE AMERICAN COUNCIL ON EDUCATION AND ITS RELATIONSHIP TO PHARMACY AS REFLECTED BY THE NINETEENTH ANNUAL MEETING.

The nineteenth annual meeting of the American Council on Education was held in the United States Chamber of Commerce Building, Washington, D. C., May 1 and 2, 1936. More than three hundred delegates were present, being by far the largest in the history of the organization.

It is impossible in the brief time allotted to this report to cover adequately the work of the American Council on Education for the year. A partial list of the authors and subjects of papers given at the meeting will give an idea of the scope of the work. The list follows:

The Annual Report of the President, by George F. Zook, President of the American Council on Education.

Planning Educational Progress, by Dr. A. J. Stoddard, Superintendent of Schools of Providence, R. I.

Regional Cooperation in Higher Education, by Dr. James R. McCain, President of the Association of American Colleges.

Trends in Professional Education, by the Reverend Alphonse M. Schwitalla, S. J., Dean of the School of Medicine, St. Louis University, and President of the North Central Association of Colleges and Secondary Schools.

A New Conception of Intelligence, by Dr. H. H. Thurstone of the University of Chicago.

A Special Plea for Education, by Dr. Lotus D. Coffman, Chairman of the Council and President of the University of Minnesota.

The Care and Education of American Youth, by Dr. Homer P. Rainey, Director of the American Youth Commission of the American Council on Education.

Recent Trends of Education in Europe, by Marie Butts, Executive Secretary of the International Bureau of Education at Geneva.

These papers and many others are printed in full in the July number of the Council's publication, *The Educational Record*. This publication should be in the library of every col-

lege of pharmacy. The subject matter of every paper mentioned above is directly related to the problems of pharmaceutical education.

The outstanding addresses, full of interest to pharmaceutical education were those of President Coffman and Dean Schwitalla. The former in a *Special Plea for Education* deplored that harum-scarum type of education so popular now, which throws to the four winds the rigid educational requirements that have been developed through the centuries and substitutes in their place the desires and whims of the adolescent child himself. As he developed his thought, although he drew no comparisons, it became perfectly evident that the present educational policies for American youth are not at all unlike in principle to the governmental policies of the so-called New Deal.

President Coffman plead for educators to hold to the basic principles in education. Those which have stood the test of time. He also plead for a change in education, but not without applying the principles of scientific experiment which would prove the value of such changes.

He said, "I agree fully with the English Association for Education in Citizenship which declares that, 'If democracy is to survive and develop as a living force, our educational system must produce men and women loving freedom, desiring to serve the community, and equipped with the necessary knowledge and powers of clear thinking to enable them to become effective citizens'." In closing his address, President Coffman declared, "It is because I believe in necessary knowledge that I make a special plea for education that puts lime in the bone, iron in the blood, and organized knowledge in the minds of the youth of this generation."

In his paper on *Trends in Professional Education*, Dean Schwitalla dwelt upon that century old controversy, the distinction between academic and professional education. He stated, "The academician still insists that there is a distinction. The 'professionalist' insists just as strongly that if there is a distinction, there might just as well not be. It may be the old story of the shield that is silver on one side and gold on the other, but it may be there is merit in the debate."

The Dean formulated three theses on the relationship of academic, cultural, and professional education to which I think all thoughtful men can subscribe.

They are:

1. Education, be it academic or professional, should be a preparation for life.
2. Educational processes are diverse, and academic processes should be a foundation for professional educational processes.
3. A profession itself, should regard the processes which it defines for its self-development and not leave this responsibility altogether in the hands of those not of its own profession.

In discussing these theses he called attention to the following pertinent facts:

1. Education is a preparation for life.
2. The life of a professional person, of a physician, lawyer, or druggist, does not altogether consist in the exercise of his professional function.
3. A lawyer plays golf and a doctor enjoys reading a non-medical book; a druggist appreciates music; it is clear therefore that the processes of education must prepare a professional man for much more than merely the exercise of his profession.
4. The professional man's life is at the same time a human life.
5. The school of medicine, or of law, or of pharmacy, can and must in a measure prepare its students for all aspects of their life and not merely for some of the aspects.
6. The school assumes responsibility for the student of medicine, law, or pharmacy, and not merely for the medical, or the legal, or the pharmaceutical aspects of that student.
7. Any other concept than this as the basic philosophy of a school, or as the objective to which the school aims, takes the school out of the classification of a professional and puts it into the classification of a technical school.
8. Any one of the fields of professional interest can, and in the truest concept of professional education, must yield human values and human applications in just as true a sense as we admit are yielded by our study of the Greek poets, or the Latin orators.

9. "The so-called professional courses can and do yield a harvest of culture, of refinement, of appreciation in addition to their technical content." For example, "Can there be anything more human in its appeal, more educative in the appreciation which it yields of human tragedy, more suggestive of the deepest stirrings of the heart, than the daily and hourly contact which the student of medicine has in his out-patient practice with the ills and sufferings of humanity? If it is objected that the *student* of medicine pays little attention to anything but the mere technical symptomology, which he is evaluating, my answer can only be that such need not be the case, and, if necessary, he must be shown that behind a venereal disease looms a wrecked home; behind a mental obsession there fibrillates a broken heart; through the shadows of a Roentgenogram of a tubercular chest he must see the withering agony on the face of a love distracted husband. These things have cultural and educational values that are not only equal to our appeals for character development and our stresses upon literary expression, but in addition they have the merit as educational instruments of immediacy and of reality."
10. "If all this is granted, where, I ask, is the distinction between academic and professional education?"

Dean Schwatilla's final thesis has to do with the establishment of a forum through the American Council on Education for the exchange of views on the objectives of education in the academic and professional fields. He commits himself very definitely to the principle, "That each profession must be allowed the fullest measure of self-determination in the development of its own standards, or rather its own criteria of excellence. When that is said, however, there still remains the importance of recognizing the relationships of any one of the professions to other human interests. This reasoning extends not only to the field of undergraduate education, but also to the field of graduate education and let us frankly admit it, even to the field of post doctrinal development. Any one of the professions which recognizes not only its specific responsibility, but also its broader responsibility, to national culture and welfare, cannot but profit by the experiences and the suggestions of other professions. It is a significant fact, to my mind, that the first suggestion for the creation of a

forum in the field of professional education has come, not from the cultural group, but from one of the professional groups, for it is the suggestion of Dr. William A. Cutter, of the American Medical Association, that such a forum is urgently needed, if the broader educational aspects of professional education are to be completely safeguarded."

Perhaps I have given undue amount of time to this report, but I have felt it was quite important to do so in lieu of the fact that its subject matter is a major subject just now in our own curriculum building and it is well to know the American Council on Education has the problem before it in a very concrete way.

Late last year President Zook sent an inquiry to the representatives of the organizations holding membership in the American Council on Education calling for suggestions as to how the Council could better serve its constituency. I made a number of suggestions as to how I thought the American Council on Education might help the American Association of Colleges of Pharmacy and I stressed the carrying out of some sort of survey of Pharmacy as was originally planned when our Association became a member of the American Council on Education. Under date of October 23, 1935 I received the following note from him:

"Dear Dean Lyman:

"I have your kind letter of October 18, containing items which are being considered in the present development of pharmaceutical education. I assure you that I am much interested in the suggestions and regret exceedingly that it did not prove possible to complete preparation for the study planned some years ago.

"The Committee on the Study of Pharmacy has been continued by the Council and I hope that at some time in the early future to see what the possibilities of reviving the project are.

"Yours very sincerely,
"George F. Zook, President."

In March of this year a conference of constituent members was called by President Zook at Chicago. Dean Jordan attended this meeting representing our Association. A report of that meeting is left to him.

From the general trend of the activities of the American Council on Education and from the results of a personal conference I had with President Zook at the Council meeting, I

am of the opinion that the American Council on Education is not so much interested in what it can do for the American Association of Colleges of Pharmacy in particular and Pharmacy in general, as it is in what the American Association of Colleges of Pharmacy in particular or Pharmacy in general can do for the whole field of education, professional in particular and cultural in general. The question is no longer what we can get, the question is what can we contribute? In other words to become a factor in the field of professional education, in the language of the day, we must get off of relief. Our future in education as in science depends upon the contributions we can make to the sum of human knowledge. It will mean pharmaceutical suicide, should we fail in meeting the challenge. It is unthinkable that we will.

In the beginning I called attention to the fact that the 1936 meeting had the largest attendance ever experienced. The membership has increased during the year from a total of 225 to 323 institutions.

During the year special grants for special projects have been received, totaling \$293,094. This does not include a special grant for the American Youth Commission which amounts to \$594,910. This commission is headed by Newton D. Baker with Owen Young as vice-chairman. The figures do not include approximately \$91,000 which comes to the Council through fees and fixed revenues for support. If you are not in some way on the New Deal payroll do not try to comprehend these figures.

You will recall a couple of years ago the Council broadened its scope of activities to concern itself with all levels of education. A recent communication from the Executive Committee gives the information that since the May meeting among new institutions joining the Council are:

The National University Extension Association.

The Delphian Society.

The National Association of Deans and Advisers to Men.

The Presbyterian Board of Christian Education.

This shows how well the Council is accomplishing its aim of a universal membership of educational bodies.

Rufus A. Lyman,

Voting Delegate.

The Work of the Problems and Plans Committee

From the beginning the Problems and Plans Committee has had no landmarks to guide its work. From the Chairman's point of view there seemed nothing to do but to feel one's way along. This is a slow procedure, especially when all work must be directed by mail. Nevertheless, progress has been made.

You will recall that a year ago a study was made to determine the most worth-while studies to be undertaken. At first it was thought these could best be carried out as co-operative efforts. That idea has been very largely given up, at least in the mind of the Chairman. It seems more can be accomplished by assigning a certain subject (the one of his choice) to a certain individual and making him responsible for the direction of the specific study. At the same time all assistance possible will be given him by the Chairman and other members of the Committee.

The studies which have been selected and assigned and now under way are as follows:

A Detailed Study of the Extent of the Teaching of Pharmacology in the Colleges of Pharmacy of the United States—by James M. Dille, Department of Pharmacology, University of Washington.

The Effect of the Four Year Course on the Caliber of the Pharmacy Student Enrolling in the Colleges of Pharmacy—by Henry M. Burlage of the University of North Carolina.

Foreign Educational Requirements for the Practice of Pharmacy—by Ernest T. Stuhr, School of Pharmacy, Oregon State College.

The Trends of Pharmacy—by L. Wait Rising, University of Washington.

A Study of Sectional Pharmacy Laws—by Eldin V. Lynn, Massachusetts College of Pharmacy.

Last year as a part of our program studies were undertaken to determine objective measurements of achievement. At the 1935 meeting the Association created a special committee called the Committee on Aptitude Tests. Since this committee will present its own report in due time, only mention is made of it here and hereafter all matters having to do with pharmaceutical tests will be referred to that committee.

The Problems and Plans Committee has also concerned itself with the obtaining of a finer type of publicity for pharmacy in both its service and its research fields.

The Science News Letter, published by Science Service of Washington, D. C., is a journal published weekly and having as its object the popularizing of science in all fields of scientific endeavor. Mr. Watson Davis is the editor. Pharmacy, as such, has never had a place in its columns. Pharmaceutical subjects have been labeled as chemistry, medicine, or public health. Shortly after the Portland meeting of last year, the matter was taken up with Mr. Davis. It was suggested that a lot of new things of public interest are happening in the field of pharmacy that would be of interest to the readers of *Science News Letter* and an appeal was made to have any writeup in the field of pharmacy labeled as such. Dr. H. B. Ward, Secretary of the American Association for the Advancement of Science, lent his influence to the proposal, as did others. The suggestion was favorably received. Nevertheless, in the issue of *Science News Letter* of February 22, 1936, two articles, both of a pharmaceutical nature appeared under the title "Pharmacology." This prompted the following note to the Editor:

"March 3, 1936.

Mr. Watson Davis,
2101 Constitution Avenue,
Washington, D. C.

Dear Mr. Davis:

Some time ago I wrote you about the desirability of having articles appearing in the *Science News Letter* of a pharmaceutical nature designated as *Pharmacy* and not as *Chemistry* or *General Medicine*.

This is not an idle notion on my part, because less than two years ago, Dr. J. McKeen Cattell, the distinguished editor of *Science*, remarked to me, that, if one should judge pharmacy by what is in the front window of a drug store, it could hardly be considered a science. I call his attention to the fact that that was like judging medicine by the conglomeration of pills in a doctor's medicine case. Whether pharmacy should have a place under the sun, depends upon its possibilities of service, its educational program, and its productive research. Its importance to society is recognized by the laws of the land, both Federal and state. Its educational program is a respectable one and trained men in pharmacy are producing a vast amount of research of a strictly scientific nature. This may be seen in our scientific journals and it has been recognized by the American Association for the Advancement of Science in the establishment of a Pharmacy Sub-section in the Medical Science Section.

Now, I think pharmaceutical research should be designated as

such, in the *Science News Letter*. It would be helpful to the cause and I think it is a claim of the pharmacy group.

In the February 22nd issue of the *Science News Letter*, pages 110 and 120, are two well written articles, one entitled "Synthetic Drugs on Increase, New Pharmacopoeia Shows" and "Doses Will Taste Better After Formulary Changes." Both of these articles are labeled "Pharmacology."

Neither the United States Pharmacopoeia nor the National Formulary are pharmacological, chemical, or therapeutic products. They are distinctly pharmaceutical standard codes. They are the legal pharmaceutical standards recognized by the law and they represent pharmaceutical research produced almost entirely by pharmacists and pharmacy should have credit for them. To label these pharmacology is as unscientific as to call an archeological discovery in Ethiopia, New Testament Greek.

Most sincerely yours,

Rufus A. Lyman,

Chairman, Problems and Plans Committee."

The answer to this note was the publication of everything pharmaceutical in the *Science News Letter*, labeled, Pharmacy, or Pharmacy and Chemistry, or Pharmacy and Public Health. This is giving credit where *credit belongs*.

I desire to call attention to our workers, that all publications of a pharmaceutical nature of public interest should be forwarded to the *Science News Letter*. Now that pharmacy has gained this recognition in the *Science News Letter*, the column of that publication must be fed with food of a pharmaceutical nature.

Dean Robert C. Wilson in his capacity as President has also taken the question of pharmaceutical publicity up with the editor of *Time* and is requesting that magazine to give pharmacy some publicity as a scientific profession, similar to that which is being given to medicine and dentistry.

I do not wish to minimize the importance of the efforts which the Committee on National Pharmacy Week is making. Looking at that effort, however, as a layman and as it is reflected in the programs on the air, in the magazine and newspaper propaganda, and in the appearance of our drug store windows during that week, I cannot help thinking that the layman feels that that effort is only one more effort to sell more merchandise through the drug store. It is up to our organization to foster in every dignified way we can, the scientific and humanitarian aspects of pharmacy.

A matter of the greatest importance to pharmacy is the pharmaceutical program of the American Association for the

Advancement of Science. This section is known as Subsection N2 of the Medical Sciences. There is some confusion as to what this section is, and who is responsible for the program. This I can clarify. This section is a section of the American Association for the Advancement of Science. As such, that organization is responsible for it and for its program. That program is not controlled by the American Pharmaceutical Association, or the American Association of Colleges of Pharmacy. The Executive Committee of the American Association for the Advancement of Science appoints a committee of three which it holds responsible for the program. This program committee is seeking the cooperation of all men doing research in the pharmaceutical sciences to keep this program alive. This is pharmacy's opportunity to ally itself with men engaged in all other lines of scientific endeavor and contribute her share to the advancement of science. As in education, so in science, pharmacy must become a contributing member to scientific endeavor and not remain a parasite upon other fields of science. The program of the Pharmacy Section at the St. Louis meeting in December of last year and the June meeting at Rochester this year have drawn favorable comments from many sources. To not support this program well at this time would be a catastrophe.

There has been some feeling that because the programs of Subsection N2 have not been largely attended, that perhaps we should have but one program a year, probably at the December rather than the June meeting. However, when we consider that these meetings are held in widely separated parts of the country and in these parts there are many young men doing pharmaceutical research, it would be tragic not to let them give a program which will contribute to the advancement of science irrespective of the number in attendance. An inquiry upon this point by the Chairman, to Dr. Henry B. Ward, Secretary of the American Association for the Advancement of Science, brought the following response:

"Washington, D. C.,
July 24, 1936.

My dear Lyman:

* * *

When I took over inside information I feel that the Subsection on Pharmacy has been very successful. For example take mathematics: it is one of the most highly developed and most productive of all fields in science. It puts out a perfectly enormous amount of high-class research work every year. At the winter meeting it has from three

to five separate meetings with long programs and audiences that tax the capacity of the halls assigned. It usually takes a separate hotel and fills that to capacity. Yet at Rochester this last summer the attendance was so small that I really dare not mention the number. It consisted of a few persons from the University of Rochester and some nearby institutions who were interested and who could understand the particular kind of mathematics offered on their program. They regarded the meeting as a success. I might take other examples.

* * *

Is it not the proper ideal for us to aim higher than the present day mark of success, namely, noise and number? Should we not attempt to bring together a smaller gathering of men who are leaders or in whom we can develop that quality, inspire them with the conviction that research is the foundation of progress and that real work in the field will exist and influence rightly the progress of the country long after the noise has died away and the numbers have faded into oblivion? I recognize that this is hard work, discouraging at times and apparently hopeless, but after all, it is the kind of work which has given us a firm foundation for science and social improvement in the real sense. I think you have a unique opportunity to put up this doctrine in meetings of your society of Rho Chi and do it again and again. Younger men are more receptive to idealism and can be relied upon to furnish a certain number of enthusiasts and missionaries to propagate the doctrine.

With warm regards believe me as always

Yours,

Henry B. Ward,
Permanent Secretary."

At the last annual meeting, the Association authorized the Problems and Plans Committee to make a study of the cost, and the feasibility and desirability of establishing a quarterly journal to take the place of our Proceedings. The name of the publication, it was suggested, might be the *American Journal of Pharmaceutical Education*. There seems to be no question as to the desirability of such a journal. Estimates have been obtained from a reliable firm which are based upon the size of the 1935 Proceedings, plus the pages that we paid for in the *Journal of the American Pharmaceutical Association* for the same year. The total number of pages amount to 328. The publication of 525 copies of the 1935 Proceedings cost the Association \$816.75 and the contribution to the *Journal of the American Pharmaceutical Association* was \$300.00, making the total cost of our publications for 1935, \$1,116.75.

The estimate so far obtained guarantees the publication of a total of 360 pages, appearing in four issues of 90 pages each; each issue to be 1,000 copies at a total cost of \$1,112.00. This figure is to include the price of postage and expressage to the subscribers.

Furthermore, if it is desired to admit advertising of a national nature to its pages, this firm will contact the advertising representatives of the leading firms in the pharmaceutical lines and secure such advertising. The nature of the advertising is to be under the control of the Association.

It is also possible that a considerable revenue could be obtained from individual subscriptions. The subscription price should be placed at a figure that would make it possible for all interested in pharmaceutical education to become supporters of the publication in a financial way.

In view of the facts here presented, I recommend that the Executive Committee be authorized to establish a journal to be called the *American Journal of Pharmaceutical Education* and to appoint an editor, editorial board, and collaborators as may seem wise, and to make such contracts as are necessary to carry out all details that may arise in connection with the establishment and publication of said Journal.

Respectfully submitted,

Rufus A. Lyman,

Chairman, Problems and Plans Committee.

Report of Committee on Pharmacy Aptitude Tests

(Since the Dallas meeting the name of the Committee has been changed to Pharmacy Predictive and Achievement Tests by action of the Executive Committee.)

This Committee asked Dr. H. H. Remmers, of the Division of Educational Reference and the Department of Education at Purdue University to act as technical adviser.

According to the recommendation of Dr. Ernest Little in his Presidential address last year, the Committee studied the possibility of setting up aptitude tests of such a nature as to prove helpful to the authorities of our member-colleges in making a wiser selection of students on a basis of character, ability, and general aptitude for the profession of pharmacy.

In making this study the Charters' Report on "Basic Material for a Pharmaceutical Curriculum" has been used as a basis. In the Charters' Report there are listed twelve activities and duties of the pharmacist, but the most of these are attainments acquired during a period of pharmaceutical education. In order to determine the aptitude of entering students

to meet these requirements the Committee believes that it would be advisable to examine students at the time of their matriculation in the following:

1. English
2. Arithmetic
3. Science
 - a. Chemistry
 - b. Biology
 - I. Botany
 - II. Physiology
 - III. Hygiene
4. Psychological Test
5. Powers of Observation
6. Powers of Reasoning
7. Ethics
8. Accuracy
9. Neatness

Tests for English, arithmetic, chemistry, and psychology are already available and of proven worth. It may be that the test for arithmetic will need some modification, but this can be determined better after a trial. Tests in physiology, hygiene, and botany are in preparation.

As far as the last five items are concerned the Committee feels that powers of observation may well be determined by the tests in physiology, hygiene, and botany. The powers of reasoning are well taken care of under the intelligence or psychological test. One of the most desirable phases for which we may wish to examine is ethics. But, while it is possible to examine a person's mind on the knowledge of ethics, it would be a most difficult, if not an impossible task to examine into the reaction of a person under a given set of conditions. Any person who knows that he is undergoing an examination in ethics would invariably put his best foot forward, whereas under other conditions he might easily choose another course even though it be unethical. The matter of examining a person for accuracy and neatness raises much the same difficulty, for a person will be accurate and neat in his work when he knows that he must be. Furthermore, the quantitative measurement of neatness is, we may say, an almost impossible accomplishment. As far as accuracy is concerned, the entering student does not have sufficient education to understand accuracy as we may apply it in pharmacy.

Therefore, the Committee is of the opinion that ethics, accuracy, and neatness must be stressed as integral parts of pharmaceutical education rather than being requirements for such education.

The Committee recommends the following:

1. That the Committee with the same or different membership be continued for a period of not less than four years to carry this study to a logical conclusion.

2. That aptitude tests in English, arithmetic, biology, chemistry, and psychology be applied in the member-colleges at the earliest practicable time and that the results of these tests be transmitted to the Committee for permanent record and study. Participation is voluntary and not compulsory.

3. Either

(a) that the Association appropriate funds necessary to finance the administration of these examinations, or

(b) that such member-colleges as desire to join in the study signify their willingness to carry that burden themselves.

4. That such schools, as enter into the study agree to carry it out for a period of not less than four years, and that a close checkup of their graduates who will have undergone this test be made so that it will be possible for the Committee to report later on the validity of the tests.

Respectfully submitted,

Carl J. Klemme, Chairman.

In adopting the above recommendations, 3 (b) was chosen in preference to 3 (a).

Report of the Committee on Activities of Students and Alumni

Shortly after the appointment of this Committee, the Chairman made resume of the reports of the Committees on Activities of Students and Alumni which had been made in previous years, and found that the information in these reports had been obtained, for the most part, from questionnaires which had been circulated among the various member colleges. In many instances, the reports contained the activities of the students for the previous year.

While the Committee recognized that a general survey of this kind might be most desired, it felt that something more constructive for the Association and more instructive for the student organizations might be presented at this time. The Committee felt that the Association, instead of observing what had been done, should offer the leadership in directing and stimulating student and alumni activity by promoting a plan whereby the outstanding men in American pharmacy may be presented to the various student organizations, from time to time, at a very small expense to either the Association or the student organizations.

The plan which the committee recommends is: that the United States be divided into four districts with a chairman for each district. During the year the chairmen can be kept informed through the cooperation of the deans or the student organizations, of any contemplated journey to another district by some outstanding pharmacist. If it is acceptable to the person making the journey, an itinerary to the various colleges might be planned by the chairman of the district to be visited, and a small subscription from each student organization visited might help to defray the traveling expenses of the speaker. In some instances, the speaker might feel inclined to defray his own expenses in view of the fact that he had other important business to transact.

The plan is presented primarily to stimulate activity among the student organizations of our colleges who are often at a loss to secure good speakers for their programs.

The Association might be benefitted secondarily, if the district chairmen could secure the names of speakers which the various student organizations would be pleased to have appear on their programs, and if any of the desired speakers were on the list of those appointed for college inspection, the expense of inspection might be greatly reduced for the Association. The Committee definitely recommends that the student organizations have the privilege of accepting or rejecting the names of the speakers extended to them.

The second recommendation offered by this Committee is that student organizations make an effort to obtain an hour on the convention program of their state pharmaceutical association. The student hour program has been a regular feature at the Florida State Pharmaceutical Association conventions, and has been considered by its members to be one

of the highlights of the convention. Participation by the student organizations at the convention creates greater student interest and enthusiasm for association work, greater association interest in the school, and an opportunity for the student organizations to disseminate professional and educational information to alumni and pharmacists of the state.

Lastly, the Committee wishes to recommend that the various member-colleges make a study of the various short courses which are being successfully offered by several of the colleges in order to arouse both the interest of the alumni and other pharmacists in the professional progress which has been made in pharmacy.

Edward J. Ireland,
Chairman.

Report of the Secretary-Treasurer of the American Council on Pharmaceutical Education

After the meeting held in Portland last year, the Council prepared a tentative draft of standards for the accreditation of colleges of pharmacy. Mimeographed copies of this draft were sent to the deans of all schools of pharmacy in this country, the secretaries of the state boards of pharmacy, the secretaries of the American Pharmaceutical Association, the National Association of Boards of Pharmacy and the American Association of Colleges of Pharmacy, to which the following letter was attached:

January 22, 1936

"Dear Sir:

Pursuant to instructions received from the American Council on Pharmaceutical Education, there are enclosed herewith two copies of proposed standards for the accreditation of colleges of pharmacy. These standards have been prepared, using as a basis those proposed by Dean Townes R. Leigh in an address delivered to the American Association of Colleges of Pharmacy in 1933.

Copies of these standards are being sent to the deans of the schools of pharmacy, the secretaries of the state boards of pharmacy, the secretaries of the associations represented on the Council and to the members of the Council, with the request that they be studied critically and that they be commented on.

Please state your recommendations for additions, deletions, or alterations clearly, designating the individual standards to which they apply by the same numerals and letters used in the form sent you.

While promptness is desirable, it is intended that the deans of

the respective colleges shall have the time necessary to discuss the proposed standards with the members of their faculties, and that the secretaries of the boards of pharmacy shall be given ample opportunity to discuss them with the members of their respective boards. It is believed that six weeks will be sufficient time for this purpose. You are therefore requested to send your recommendations to the undersigned not later than March 15, 1936.

In making recommendations for additions, deletions or alterations, please bear in mind that these are minimum standards for the accreditation of colleges of pharmacy and that additional forms for securing the information desired from the colleges will have to be prepared after the standards are formulated.

Sincerely yours,
Andrew G. DuMez, Secretary."

Comments and suggestions for changes were received from officials representing 50 colleges of pharmacy, five state boards of pharmacy, the National Association of Boards of Pharmacy and the American Association of Colleges of Pharmacy. The last of the commentaries was received on May 2nd. These comments and criticisms were tabulated and mimeographed copies of the tabulation were mailed on July 13, 1936 to all persons who received the initial draft. The following letter accompanied the comments:

July 13, 1936

"Dear Sir:

Comments on the tentative draft of standards for accreditation of colleges of pharmacy have been received from 44 colleges of pharmacy, the Assistant Commissioner of Higher Education of the State of New York, representing the Colleges of Pharmacy in that state, the secretaries of five state boards of pharmacy, the secretary of the National Association of Boards of Pharmacy and the secretary of the American Association of Colleges of Pharmacy. The last of these comments was received on May 2, and there are still some who promised to comment but who have failed to do so to date.

These comments have been classified and tabulated and are being sent you at this time so that you may study them before the annual meeting of the Council which will be held in Dallas in August. The program of the annual convention of the American Pharmaceutical Association and affiliated organizations is being planned so that there will be opportunity for a joint discussion of the proposed standards at that time. While it is realized that it will probably be necessary to undertake further studies or surveys of certain phases of pharmaceutical education before standards which are entirely satisfactory can be formulated, it is hoped that standards satisfactory for the time being will be adopted at the Dallas meeting so that the accreditation of colleges of pharmacy may be proceeded with promptly.

Please safeguard your copy of these comments and bring it with you to the meeting at Dallas.

Sincerely yours,
Andrew G. DuMez, Secretary."

On August 23, 1936, the Council met and revised the standards first sent you to meet the criticisms received and about which you were informed through the commentary sent you on July 13th. One hundred and fifty copies of revised portions of the standards are being mimeographed and will be available for distribution at the symposium to be held on Thursday. A copy of the revised draft is attached hereto for your records.

It is intended that there shall be a full and free discussion of these standards at the symposium so that all who may desire to express an opinion on them may have the opportunity to do so. Following the symposium, it is the intention to proceed with the preparation of the final draft and with the task of making it effective.

A financial statement is also attached for your information.

Respectfully submitted,
Andrew G. DuMez.

Financial Statement of the American Council on Pharmaceutical Education

RECEIPTS

1936

January 1	balance on hand.....	\$400.00	
March 1	received from A. Ph. A.....	200.00	\$600.00

EXPENDITURES

February 8	H. G. Roebuck & Son, letter heads and envelopes	30.00	
February 12	University of Maryland, Stamps.....	6.60	
July 13	Meyer & Thalheimer, envelopes, large....	1.65	
July 15	University of Maryland, Stamps.....	8.10	
August	A. G. DuMez for mimeographing and mailing 1150 copies of tentative standards, 250 copies of comments, 25 copies of revised standards.....	74.50	
August	University of Maryland for 48 stencils.....	5.96	
	mimeograph paper	15.20	142.01
August 20	Balance on Hand.....		\$457.99

Andrew G. DuMez,
Secretary-Treasurer.

EDITORIALS



The American Journal of Pharmaceutical Education

January 1937 marks the advent of what has been spoken of by many as the most significant development in the field of pharmaceutical education since the adoption of the minimum four year course. I refer to the establishment of the American Journal of Pharmaceutical Education, the first number of which you are now reading.

The development in pharmaceutical education during the past decade and a half is a record of achievement with which every reader of this journal is familiar and unquestionably constitutes the brightest spot in the whole field of pharmacy during that period of time.

The only healthy reaction to a record of this sort is that it must be continued. It is this spirit which has given rise to the American Journal of Pharmaceutical Education. Its success will be assured if every member of our association will accept his appropriate share of responsibility. This responsibility consists first of becoming a subscriber to the journal, and secondly of sending to our Editor as frequently as possible material which you feel might prove useful to him. I know that you will be glad to do this and that you will not only feel obligated but privileged to render such assistance.

We are very fortunate to have Dean Lyman as our Editor. It was his vision and his enthusiasm which were responsible for its founding. His leadership, supplemented by your co-operation, will make of it a useful, vital instrument in the life of our association.

It would be a major misfortune if anyone should misinterpret the founding of this journal as indicating a loss of interest on our part in the Journal of the American Pharmaceutical Association. The American Pharmaceutical Association is our association and its activities are formulated on a basis

of the welfare of the whole field of pharmacy. The members of the American Association of Colleges of Pharmacy will not be found delinquent in supporting all the activities of our parent organization which, in our judgment, seem in harmony with the best interests of American pharmacy. We believe it is your wish that our section in the Journal of the American Pharmaceutical Association be continued and that the American Journal of Pharmaceutical Education should find new fields of usefulness and helpfulness to its members.

May we unite in rendering to our Editor the help and co-operation which will crown our new enterprise with brilliant success and render to our members a service which will assist in keeping pharmaceutical education on the highway of progress.

ERNEST LITTLE.

Dr. E. F. Kelly Expresses Commendation and Offers Cooperation in the Journalistic Field

Forty-four states and the District of Columbia now have prerequisite laws or regulations which require that applicants for registration as pharmacists by the respective state boards of pharmacy, shall be graduates of schools or colleges of pharmacy approved by the boards. Two of the remaining four states are sponsoring this legislation in the present sessions of their legislatures with promise of success. Pharmacy is now generally recognized as a profession the members of which must be educated and trained to be useful citizens and to render a highly technical and necessary public health service.

This favorable situation gives our schools and colleges of pharmacy a splendid opportunity and at the same time places a heavy responsibility on them. The future of our profession so far as its personnel is concerned, rests squarely on the present product of these institutions since no profession can be stronger or more effective than its practitioners make it.

Pharmaceutical education has, therefore, taken on a new significance and a Journal of Pharmaceutical Education devoted to this highly specialized branch of activity can render

a great service in stimulating continued progress in pharmaceutical education and in correlating it with other educational groups. The American Pharmaceutical Association heartily congratulates the American Association of Colleges of Pharmacy upon its foresight in establishing the new Journal, and wishes for the publication and its producers a full measure of success in the fine work they are planning to do for the profession.

The American Pharmaceutical Association is pleased that the American Association of Colleges of Pharmacy plans to continue and to improve its Department in the Journal of the American Pharmaceutical Association. This is a helpful contact with the profession and will inform pharmacists about the problems and the progress of the colleges. The American Pharmaceutical Association stands ready as always, to have the American Association of Colleges of Pharmacy make of this Department whatever it feels will be most helpful to the profession and to the colleges.

The Colleges, the Boards and the Association must continue to work for pharmacy in the close accord they have maintained in the past. The new Journal will fill an important place in our pharmaceutical setup and should have the earnest support of all three groups.

E. F. KELLY.

Food, Drug and Cosmetic Legislation

As this is written, December 29, 1936, it seems highly probable that early in the new year bills will be introduced in both the House and Senate providing for better control of the manufacture, advertising and sale of foods, drugs and cosmetics. Since the main objective of such legislation is better protection of public health, the interest of pharmaceutical educators in it has always been keen. When similar legislation was before Congress at former sessions, the American Association of Colleges of Pharmacy was the first national pharmaceutical organization to endorse the measures as sponsored by the Food and Drug Administration and to work for their passage. They were followed by other national groups and S-5, as passed by the Senate, had the endorsement of all the

members of the National Drug Trade Conference at its 1935 meeting. The American Pharmaceutical Association, National Association of Boards of Pharmacy, and the American Association of Colleges of Pharmacy reaffirmed their position on this subject at the Dallas meeting in 1936.

It would therefore seem that if the forthcoming measures are well within the limits of the items agreed upon at the last session of Congress, they should start on their way with strong backing on most of the important issues. As our readers well know, the chief controversial feature of all the bills has been where the control of advertising should be vested. S-5 was finally beaten in the House on this one point. It is significant that the public health groups in American Pharmacy advocate that the Food and Drug Administration be given this authority; the more commercial groups lean rather strongly to control by the Federal Trade Commission although in S-5 as passed by the Senate control was left with the Food and Drug Administration. The American Association of Colleges of Pharmacy has never wavered in its attitude on this point. We believe sincerely that the Food and Drug Administration is in far better position to know and to do what is best for the public welfare.

After deliberate consideration of all the issues involved we are convinced that the present situation offers a rare opportunity for our group to have a large share in shaping and organizing public opinion to the end that strong and effective food, drug and cosmetic legislation be passed at the coming session of Congress. As a group, pharmaceutical educators relatively free from the entangling alliances of trade problems, see pharmacy as an intimate health service profession. We are strong as we live up to and teach these ideals; we are weak when we prostitute them. No finer accomplishment could come to us in 1937 than to have a large share in the passage of measures to protect the sick, the ignorant sick in most instances, from the clutches of that small but powerful and selfish group in our circles who prey upon the fear and helplessness of so large a part of our underprivileged fellow-citizens.

WORTLEY F. RUDD.

The National Drug Trade Conference

The annual meeting of the National Drug Trade Conference was held at the Mayflower Hotel in Washington, D. C., December 8, 1936. As usual, it was well attended, a number of visitors being present in addition to the regularly accredited representatives of the constituent organizations. The American Association of Colleges of Pharmacy was represented by its appointed delegates: Dean W. Paul Briggs of George Washington University, Dean A. G. DuMez of the University of Maryland, Dean J. Lester Heyman of the University of West Virginia and Dean W. F. Rudd of the Medical College of Virginia, as alternate. Dean Ernest Little of the New Jersey College of Pharmacy was present by invitation, and Dean Robert C. Wilson of the University of Georgia and Professor William G. Crockett of the Medical College of Virginia as visitors.

The National Drug Trade Conference is exactly what its title implies, and by virtue of this fact, any action taken by the organization must be by the unanimous consent of the constituent members. In spite of this handicap, some resolutions were adopted and the concensus of opinion of those present was obtained on several matters of interest to pharmacy as a whole. Considered from the standpoint of pharmaceutical education, the following resolutions and reports are of particular interest.

A resolution calling for the speedy enactment of new food, drug and cosmetic legislation was adopted. This resolution is essentially the same as that adopted by the American Pharmaceutical Association in September, with the exception that all reference to the Senate bill known as S-5 was deleted. The resolution places pharmacy as a whole on record as recognizing the need for the enactment of further legislation to adequately control the manufacture and distribution of foods, drugs and cosmetics and leaves the way open for Congress to determine the form which this legislation should take.

Another resolution adopted by the conference places pharmacy on record as favoring legislation which will prohibit all advertising to the lay public of remedies for the treatment of venereal diseases, and which will confine the sales of such remedies to those ordered upon physicians' prescriptions.

A third resolution records approval of legislation making

it mandatory to state on the labels of all drug products, the name and address of the manufacturer, processor or distributor and to give in addition, such other information as will offer ready identification of the manufacturer, processor or distributor.

A fourth resolution adopted favors the enactment of legislation to provide for the appointment of pharmacists to membership on state and municipal boards of health.

Dean Ernest Little of the New Jersey College of Pharmacy made the report for the Committee on Endowment, owing to the absence of the Chairman, Philip I. Heuisler, who died during the year. In his report Dean Little urged that manufacturers in the drug trade be approached with a definite program of research which can be conducted by colleges of pharmacy and that the manufacturers be invited to contribute to the expense of promoting and carrying out this kind of research. Dean Rudd of the Medical College of Virginia suggested that manufacturers support specific research problems in the colleges equipped to do this kind of work, and that some means be provided for supplying information to manufacturers regarding the kind of research that the individual colleges of pharmacy are equipped to carry out. Dean Rudd's suggestion was approved by Carson P. Frailey, Executive Vice President of the American Drug Manufacturers' Association and President of the Conference, and by Dr. E. L. Newcomb, representing the National Wholesale Druggists' Association, and others.

Dr. Swain, in reporting for the Committee on the Status of Pharmacy and the Drug Trade discussed the efforts which had been put forth in the past year to raise the professional standing of pharmacy. His report should be read in full by all those interested in pharmaceutical education as soon as it becomes available.

Dr. R. P. Fischelis, Secretary of the New Jersey Board of Pharmacy, in reporting for the Committee on Information Regarding the Distribution of Drugs and Medicines, advocated more informative labeling of all drug products, the education of the general public with regard to the importance of proper labeling, formula disclosure, and the desirability of confining the flow of drugs and medicines from laboratory to consumer through an uninterrupted system manned by a professionally trained personnel.

ANDREW G. DUMÉZ.

Pharmacy and Medicine

The American Association of Colleges of Pharmacy at their annual meeting at Dallas in August, 1936, was particularly delighted and highly honored to have as its guest Dr. G. W. Collins who is a member of the chemical laboratory staff of the American Medical Association, who came to us as the personal representative of Dr. Paul Nicholas Leech, Director.

Dr. Leech had been invited to address our Association as our guest speaker. Expressing a desire to accept our invitation, and to acquaint himself with the character of work we were doing, Dr. Leech found at the last moment that it would be impossible to be present.

The desire of Dr. Leech to meet with us, and the actual presence of his personal representative, Dr. Collins, is a splendid recognition on the part of the American Medical Association of the aims and objectives and accomplishments of our Association, and constitutes a splendid omen of what may lie ahead in developing a better understanding between Pharmacy and Medicine in America, whereby their united efforts may be more intelligently and efficiently directed in our efforts in the interest of public welfare.

ROBERT C. WILSON.

Progress in Pharmaceutical Test Studies

During the Dallas meeting the question of objectives and achievement tests was brought before the Executive Committee which, in turn, referred the matter to the Committee on the Study of Pharmacy Aptitude Tests, thus considerably broadening the scope of the committee's function.

Through the efforts of Dr. Remmers and Dr. George F. Zook, president of the American Council on Education, funds were furnished by the Council to hold a meeting of the committee at Purdue University on November 27 and 28, 1936. Dean Little was unable to attend and his place was filled by Dr. R. L. McMurray of the School of Pharmacy at Ohio State University.

The committee centered its discussion on aptitude tests, objectives and achievement tests from the standpoint of correlation, methods of application, and interpretation of results. It is fortunate that the committee was able, by action of the Executive Committee, to take up the matter of achievement tests since this is unquestionably the surest means of determining the true value of the predictive or aptitude tests. It would be a gross error indeed to apply predictive tests which were not valid, and use the information obtained from such tests as a basis of educational guidance.

The working plan as set up by the committee during its recent meeting has been forwarded to the American Council on Education for consideration by that body. However, considerable work remains to be done in arranging the final details of administration. In this work the committee must necessarily request the cooperation of the participating colleges and it is the earnest hope of the committee that all member-colleges of the Association will join in this work.

The detailed results of this committee work, together with subsequent action of the committee during the current year, will be reported before the Association at its next meeting.

The committee extends the invitation to any staff members of Association colleges, who may be interested in the study of objectives and achievement tests, to communicate with the chairman in regard to this work. There is ample opportunity for many workers in this phase of the project and the committee will appreciate any cooperation. The committee likewise invites comments, criticisms, and suggestions regarding the project.

CARL J. KLEMME.

THE EDITOR'S PAGE

You are now reading the anlage of the *American Journal of Pharmaceutical Education*. It came about in this way. For a long time there has been a feeling that the Proceedings did not satisfy the needs of the American Association of Colleges of Pharmacy. I suppose this happens in the life of every organization. Well do I remember back in 1912 when it happened to the American Pharmaceutical Association. The activities of that organization became so numerous and so diversified that some other means of communication than the Proceedings was needed. The *Journal* was born. Pharmaceutical education has come to be one of the major fields of professional education. We have not only been asked to contribute something creative to the field of professional education, but we are expected to contribute our share to the field of general education, on all its levels, as well. Such service cannot be rendered by meeting together and thinking together once a year. The journal will enable us to do that four times a year and let us hope that in the not too distant future, it may be still more frequent.

This is how it happened. At the Dallas meeting last fall, the Association expressed its opinion in no uncertain terms, that the time had come for the establishment of a journal devoted exclusively to the problems of pharmaceutical education and administration. The Association left the whole matter in the hands of the Executive Committee with power to act. The Executive Committee appointed a subcommittee consisting of Ernest Little, Charles B. Jordan and Rufus A. Lyman, Chairman, to work out all necessary details in connection with the establishment of a journal. This committee functioned and about the middle of December it was decided to proceed with the publication of the journal, the entire Executive Committee to act as a publication board with Rufus A. Lyman as Chairman and Editor. It was further decided to retain the Association's department in the *Journal of the American Pharmaceutical Association* under the control of the Publication Board.

Following the instructions of the Board, the Editor has asked the dean of each member college to nominate some member of his faculty to act as an associate editor, or collaborator.

The Editor looked up the meaning of the words collaborate and collaborator in the dictionary. When he found the verb means, "to labor together" and the noun means, "one who collaborates," he immediately chose to designate the workers as Collaborators. The function of the Collaborators will be to do everything that is necessary to be done, from the gathering of news and the obtaining of, or writing, of worthwhile contributions and editorials, to the collecting of subscriptions. Details will be taken up with the Collaborators personally. The name of each Collaborator, as soon as appointed, will appear in each issue of the *Journal*. As the editor read over the list of Collaborators he was struck by the number of names that were new to him. These names can only be a fraction of the host of young men yet unknown in a national way, that are engaged in pharmaceutical education. The possibilities in this group are grand to contemplate. And what a camaraderies they have ahead of them in this work!

The question arises as to what shall be printed in the *Journal*. From a necessity which is obvious, the material in the first two or three numbers must be determined by the Editor. He has ideas. Certainly the papers given at the annual meetings and teachers conferences, together with a summary of proceedings and committee reports should appear in due time. Editorials on the live problems of the day and announcements of scientific programs, such as that of (N₂) Subsection on Pharmacy of the American Association for the Advancement of Science, have a place. These scientific papers, however, must find a place for publication elsewhere as this is not a scientific journal, only in so far as scientific principles and methods are applied in the solving of problems of pharmaceutical education and administration. As to news, only such items will be published that the Editor considers may be of general interest. In other words, news items must have more than a local interest. The Editor will always weigh the material presented in the light as to whether it is worth two dollars and thirty cents a page (the present cost of publication) to the cause of pharmaceutical education. These are only suggestions which the Editor has made primarily for his own guidance until such a time as the Association may be more specific in the conduct of the *Journal*. This is your journal and the Editor will welcome the severest criticism from the appearance of the very first number.

The question who shall receive free copies of the *American Journal of Pharmaceutical Education* has not been determined. One copy of course will be sent to the library of each member college. It undoubtedly should be sent to other libraries, both domestic and foreign, where the Proceedings have formerly been sent. For the first year the major part of the cost of publication can be paid out of our income, as the cost of the Proceedings have been. It should be understood that neither the Editor nor anyone connected with the production of the *Journal* receives any compensation. This is a labor of love—we hope, with men of vision. The Editor under date of January 25, 1937, mailed his personal check for two dollars to Professor Zada M. Cooper, of the University of Iowa, and hopes thereby to go down in history as subscriber number I, to the *American Journal of Pharmaceutical Education*. May many follow after.

On another page is the program and a brief abstract of the program of the pharmacy section given at the Atlantic City meeting of the American Association for the Advancement of Science in December. This program is serving a real purpose in giving pharmacy a position among the creative sciences. Dr. John C. Krantz is doing an excellent piece of work in building these programs. He is already calling for papers for the Denver meeting next June. This is an opportunity for our research workers in the Rocky Mountain region and for those who spend their vacation there, to produce a good program.

The University of Oklahoma and the Philadelphia College of Pharmacy and Science are to be commended for the popular programs they are sponsoring. These programs present in a dignified way the public service the pharmacist renders.

In his presidential address, printed in the current issue, Dean Robert C. Wilson left the well beaten path along which we have been plodding for a third of a century and struck out into the realm of things spiritual. Not once did he mention brick and mortar, office, laboratory, or lecture room, equipment, library, or the number of men on the staff. Far above these things he soared and dwelt upon the spiritual perfection that must be attained by teacher and pupil if pharmacy is to take its proper place in the world as a profession of service. All thoughtful men know he is right, but to fully appreciate his attitude requires the spending of at least one day in northern Georgia as I did in May, 1936.

The Wilson car stopped at the curb in the village of Jefferson a few minutes run from Athens. I found myself standing in front of a house showing signs of decay in spite of apparent heroic efforts to save it. In a room in this house Crawford W. Long discovered how to give humanity relief from pain and made the triumphs of modern surgery possible. I found my hat in my hand. Certainly a crumbling building did not cause me to remove it. No hat could stay on a man's head at the scene of that humanitarian accomplishment.

A few miles farther on the car again stopped and I found myself bare headed before a dilapidated old farm house. The yard was strewn with wornout farm tools; pigs were sleeping in the shade of the crumbling foundation. Near by in a weed covered burial lot I found a broken slab of stone still protecting a grave. On the surface was carved the name and date, William Harris Crawford—1772-1834. Crawford was a friend of President Monroe and Secretary of the Treasury in his Cabinet and within the crumbling walls of that old house, Monroe had penned the Monroe Doctrine.

The car rolled on. Mansion after mansion we passed, each having stately pillars that would have done credit to an Athenian temple. Now all of them are in a state of decay and the marvelous boxwood gardens that once surrounded them have been torn up to enhance the beauty of a distant city. It required no flight of imagination to feel the friendship and hospitality of those plantation homes in plantation days, for those qualities still remain the prized possessions of the people of Georgia.

The material things I saw that day belong to another age. They are gone with the wind. But the spiritual things live on, a blessing to humanity. Robert C. Wilson is a product of that civilization. He could rise above these decaying things about him and bring us a message of the value of things spiritual. Only spiritual things are eternal.

Dr. Lotus D. Coffman, President of the University of Minnesota has been one of our severest critics for trying to determine the efficiency of our colleges by the use of a yardstick. Once he said to the writer "Why don't you do something for the intellectual and spiritual growth of your faculties?" I think if President Coffman could have heard Doctor Wilson read his address, he would have remarked, "Now, Gentlemen, you are on the right track."

Gleanings from the Editor's Mail

I do not envy you your task, but I am sure it will be well worth the effort to pharmacy.

CHARLES E. MOLLETT,
The University of Montana.

To me it is a final step in the higher realms of our particular branch of education. At least we have a means of communication among ourselves that cannot but result in a most progressive movement. If the contents of the publication can be kept on a plane that is truly representative of our abilities, it will eventually bring that long sought for recognition among the other sciences, that pharmacy so deserves.

JOHN F. MCCLOSKEY,
Loyola University.

It pleases me to learn that you are putting into execution promptly the plans for starting the American Journal of Pharmaceutical Education. There is considerable evidence to support the opinion that the next aggressive move in pharmaceutical colleges will be directed at the objective of modern educational philosophy. Your new publication should do a great deal to awaken interest and to remove the many handicaps that our peculiar traditional practice has placed upon us.

ROLAND T. LAKEY,
Wayne University.

I am very much interested in the development of this journal and sincerely hope that it will prove of material benefit to the Association.

E. R. SERLES,
South Dakota State College.

I am pleased that we are to have a journal of our own, and I am sure that it will be most successful.

WM. A. JARRETT,
Creighton University.

I am much pleased that the Journal of Pharmaceutical Education is to be established. You may count on our enthusiastic co-operation and assistance.

HUGH C. MULDOON,
Duquesne University.

In my opinion, this American Journal of Pharmaceutical Education is a step in advance for pharmacy. The colleges have problems, which cannot be met by journals such as the A. Ph. A. However, I do have every regard for the A. Ph. A. Journal, and in my opinion, it is the only publication really fostering professional pharmacy.

A. O. MICKELSEN,
North Pacific College of Oregon.

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I feel, Dean Lyman, that it is a good thing to start this journal. It will take some very hard work until it becomes fully established and policies are well agreed upon. You have done a fine thing for pharmaceutical education in pushing this matter.

C. W. JOHNSON,
University of Washington.

I like the way you have gone at this. You and the Publication Board now have a great opportunity, and I know you are going to meet it with discretion, ability and energy. You have my best wishes.

WORTLEY F. RUDD,
Medical College of Virginia.

I am very glad that this project (The American Journal of Pharmaceutical Education) is to be carried out and predict for it great success.

EDWARD H. NILES,
Indianapolis College of Pharmacy.

Please be assured of our co-operation in this work. We have long felt that such a journal was greatly needed.

JOHN N. McDONNELL,
*Philadelphia College of Pharmacy
and Science.*

I fully trust that the new journal will be a success.

W. T. SUDRO,
North Dakota State College.

I think this is a wonderful opportunity to do something real constructive in behalf of pharmacy. Rest assured that we will do all we can to help make the project a success.

CLAIR A. DYE,
Ohio State University.

NOTES AND NEWS

Dean Curry's service as chaplain of the 1936 meeting was appropriate, dignified, and appreciated.

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Dean J. Grover Beard suffered a serious and painful injury in an automobile accident just preceding Thanksgiving. For several weeks hospitalization was necessary. He is now convalescing at the home of a sister, Mrs. Phin Horton, 715 South Main Street, Winston, Salem, North Carolina. Messages of cheer undoubtedly will be appreciated.

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Dean A. G. DuMez, University of Maryland, has recently been reelected a member of the Executive Committee of the National Drug Trade Conference.

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Assistant Dean Howard C. Newton of the Massachusetts College of Pharmacy, has been named Acting Dean following the death of Dean Bradley.

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The University of Washington, College of Pharmacy reports an unusual number of women entering the institution at the beginning of the current year. It is also stated that they are getting the major share in scholarship.

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Dr. Glenn L. Jenkins, formerly Professor and Head of the Department of Pharmaceutical Chemistry at the University of Maryland has accepted a corresponding position in the University of Minnesota. Dr. Jenkins took the place formerly held by Dr. Charles H. Rogers, who was advanced to the deanship July 1, 1936, upon the retirement of Dean Frederick J. Wulling.

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The University of Mississippi Branch of the American Pharmaceutical Association held its regular semi-monthly meeting December 18 at the College Inn, Oxford, Mississippi. The speakers of the evening were Colonel F. W. Duckworth, retail pharmacist of Booneville, and Dr. Charles E. Wilson, of Corinth, who is Director of U. S. P. and N. F. Extension

for the Mississippi State Board of Pharmacy. Both speakers addressed the audience regarding various phases of professional pharmacy and the importance of pharmaceutical organizations, stressing the need for cooperation of individual pharmacists.



Dr. G. Gustavson has been recently elected Professor and Head of the Department of Chemistry at the University of Colorado, taking the place of Dr. John B. Eckley, who retires on account of age. Doctor Gustavson is a native of Colorado and had his training at the University of Denver and the University of Chicago. He has held an instructorship at the Colorado Agriculture College and a professorship in the University of Denver. He has been a Douglas Smith Fellow in Medical Research and a visiting professor in biochemistry in the University of Chicago. He was a delegate to the Second International Congress on Sex Research in London in 1930. His special interest is in the biochemistry of the endocrines. His researches number more than forty.



Due to the death of Dean Theodore J. Bradley, Dr. W. G. Crockett, Professor of Pharmacy, School of Pharmacy, Medical College of Virginia, has assumed the duties of the presidency of the American Association of Colleges of Pharmacy. Doctor Crockett received his early training at Hampden, Sidney College, Virginia. Later he received the master's degree from New York University and the doctorate from Columbia. Prior to his entering teaching, he had a wide industrial experience as a chemist with the Department of Health of New York City; E. R. Squibb and Sons, Brooklyn; and the E. I. duPont deNumours of Wilmington, Delaware. During the World War he served as a research chemist in the Chemical Warfare Service at Washington. In 1919 he became Professor of Pharmacy at Baylor University, Dallas, Texas. He went to the Medical College of Virginia in 1920 and has been with that institution since. He has served as chairman of the Section on Practical Pharmacy and Dispensing of the American Pharmaceutical Association; chairman of the Conference of Teachers of Pharmacy of the American Association of Colleges of Pharmacy, and as editor of the Bulletin and chairman of the Virginia Section of the American Chemical Society. He is a member of the Revision Committee of the United

States Pharmacopoeia and of the Board of Review of the Journal of the American Pharmaceutical Association.

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In October of last year Dr. Haag of the School of Pharmacy of the Medical College of Virginia, gave a paper on *The Persistence of the Action of Digitalis*, before the Virginia Medical Society at Stanton. In November he gave a demonstration of this action before the Southern Medical Association in Baltimore. In December he spoke on the toxicity of rotenone containing products before the American Association of Insecticide Manufacturers in Philadelphia.

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The College of Pharmacy of the University of Iowa sends out a news letter to alumni and former students every six weeks throughout the entire year. It is an eight-page bulletin in which everything of interest to alumni is reported. It keeps closer touch with the University and makes it much easier to keep an accurate record of their progress, occasionally it serves as a medium to emphasize some "cause" which the profession is undertaking in the state. It is written by staff members. Occasionally a special double number is issued. Alumni report that the news letter is much appreciated.

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On December 1, 1936, the Medical College of Virginia held dedicatory exercises for the new \$550,000 Outpatient Building which will be completed next fall. The Honorable F. Harold Ickes, Secretary of the Interior, officiated at the laying of the corner stone and gave a brief address. The new building will also house several other departments of the Schools of Medicine and Pharmacy. The School of Pharmacy will have among other new additions, modern dispensing pharmacy. In it the senior students will receive practical experience in prescription compounding under the supervision of faculty members. The dispensing pharmacy is not an innovation here. For several years one has been in operation in which the students compound about 10,000 prescriptions annually. However, the new building will provide even more adequate facilities and the number of prescriptions compounded by students is expected to be materially increased.

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The following changes in faculty personnel have recently

been made at the School of Pharmacy of the University of Maryland:

Dr. Walter H. Hartung, who was recently appointed to a professorship of pharmaceutical chemistry succeeds Dr. Glenn L. Jenkins, who resigned to accept a similar position in the College of Pharmacy of the University of Minnesota, is a native of Minnesota. Dr. Hartung received his bachelor's degree from the University of Minnesota in 1918. During the World War, he served in the Marine Corps and spent ten months with the American Expeditionary Forces in France. During part of this time he attended the University of Aix, France. He was a graduate student in the University of Wisconsin from 1923 to 1926, serving as a laboratory assistant in organic chemistry for two years and as a university fellow for one year. He was given the doctorate by the University of Wisconsin in 1926. Dr. Hartung has had practical experience, both as a teacher and as a research worker. After obtaining his bachelor's degree at Minnesota, he served as a high school teacher for two and one-half years. For the past ten years, he has been a research chemist for Sharp & Dohme, and during that time has published more than twenty-five scientific papers dealing with the synthesis of propanolamine derivatives, some of which possess pressor and anesthetic actions; the acylaniline derivatives, a new series of anesthetics; catalysts for promoting organic reactions, etc. Dr. Hartung comes to the School of Pharmacy at an auspicious and interesting time with respect to research, as twenty graduate students are enrolled in the School of Pharmacy this session and twelve of them will major in pharmaceutical chemistry. Dr. Hartung married Miss Corda Baumhoefner, a graduate of the University of Minnesota, and they are the parents of three boys. They have established their home at 3505 Plateau Avenue, Howard Park, Baltimore, Maryland.

The work in physiological chemistry has been transferred to the Department of Pharmacology, under the direction of Dr. Marvin R. Thompson. Miss Georgiana S. Gittinger, a graduate of Hood College and also the University of Virginia has been added to the staff. Miss Gittinger formerly served as technician in the Johns Hopkins Hospital, the Charlestown General Hospital, at Charlestown, West Virginia, and as a junior pharmacologist in the Food and Drug Administration, United States Department of Agriculture. L. Mercer Gilbert,

Jr., a graduate in pharmacy of the University of North Carolina is a new addition to the staff.

Miss Winifred Keyes, a graduate in pharmacy of the University of Montana, John M. Cross, a graduate in pharmacy of Rutgers University, and Thomas A. Mosbey, Jr., Frank A. Bellman, Bernard P. McNamara, and Charles A. Youch, all graduates in pharmacy from Maryland have been added to the teaching staff of the Department of Pharmacy.



The University of Washington College of Pharmacy, cognizant of the fact that the world's supply of cascara bark centers in the Pacific Northwest has for years done research on its production. As a result of the vision of Dean C. W. Johnson the college has an experimental grove of cascara trees that are now about twenty years old. This portion of the drug garden arboretum is probably the only one of its kind, and it provokes the praise of all who inspect it. Dr. F. J. Goodrich, professor of pharmacognosy at the University of Washington has just planted a ten acre tract to trees of *Rhamnus purshiana* of all sizes from slender first year stems to large specimens. He expects, in the near future to increase the planting to fifteen acres. The land is so situated that the cascara will have all types of growing conditions, from very moist shaded hillsides to dry sunny slopes and rich bottom land. Annual reports are to be made on the progress of the trees. The experimental data thus obtained will be of great value for those interested in cascara culture on the west coast.

Pharmacology, as a separate department in the curricula of colleges of pharmacy is slowly gaining acceptance and the recognition it deserves. The College of Pharmacy of the University of Washington last September, added such a department to its organization. The department is under the direction of Dr. James Madison Dille. Dr. Dille received his undergraduate training in the College of Pharmacy of the University of Nebraska and the masters degree was also obtained from the same institution with pharmacology as a major. The doctorate was conferred upon him in 1935 by Georgetown University, Washington, D. C. Dr. Dille is well known because of his researches in anesthesia and the pharmacology of the barbiturates.

The Philadelphia College of Pharmacy and Science announces the following changes:

Charles H. LaWall, to be Professor of Pharmacy. Ivor Griffith to be Professor of Theory and Practice of Pharmacy and Assistant Dean of Pharmacy. Frank X. Moerk, who for over fifty years was a member of the teaching staff becomes Emeritus Director of the Chemical Laboratories. Arthur Osol to be director of the Chemical Laboratories and Assistant Dean of Science. Adley B. Nichols to be Associate Professor of Pharmacy. John N. McDonnell and Linwood F. Tice to be Assistant Professors of Pharmacy, and Joseph W. E. Harrison, forensic analyst and food chemist for the Commonwealth of Pennsylvania to be Assistant Professor of Biologic Assaying.



Dr. Harald Groth Oxholm Holck has recently been appointed Professor of Pharmacology in the College of Pharmacy of the University of Nebraska. Doctor Holck is a native of Denmark. He had his undergraduate work, as well as his training for the doctorate at the University of Chicago. After graduation he had a Rockefeller Fellowship for the perfection of pharmacological teaching. He spent a year in some of the outstanding laboratories of this country, as well as those of Copenhagen, Berlin, and Munich. From 1929 to 1934 he was in charge of the Department of Pharmacology in the Medical School of the American University of Beirut, Syria. For two years before coming to Nebraska, he was Research Associate, directing the work of graduate students in research in the Department of Physiology of the University of Chicago. His researches cover many fields. The most extensive ones have been upon "Fletcherism" and the pharmacology of the barbiturates.

MISCELLANEOUS ITEMS OF INTEREST

Program

For the (N₂) Subsection on Pharmacy of the American Association for the Advancement of Science at Atlantic City Meeting, December 28, 1936.

1. *Some Observations on the Bioassay of Digitalis Preparations.* Marvin Thompson, University of Maryland, School of Pharmacy.

It was demonstrated that the International Reference Standard Digitalis powder gives rise to variable preparations compared with it in Great Britain, United States and Canada, where the methods set forth for extracting the standard are different. A recommendation was made for the unification of these methods.

2. *The Quantitative Determination of Small Quantities of Chloride and Sulfate Ions in Aqueous Solutions by Electrical Conductivity.* Richard E. Houghton and Arthur Osol, Philadelphia College of Pharmacy and Science.

The authors presented a conductivity method for the determination of traces of chlorides in the presence of other ions.

3. *The Metabolism of Adrenalectomized Rats.* C. Jelleff Carr and Frances Beck, University of Maryland, School of Medicine.

The authors discussed the metabolism of the adrenalectomized rat. In general, it was shown that during the survival period after adrenalectomy, the metabolism diminished twenty-five per cent, without accompanying disturbance of carbohydrate metabolism.

4. *Studies on a Liver Preparation which Protects Against Certain Liver Poisoning.* J. C. Forbs, Medical College of Virginia.

The author discussed the isolation of a crystalline purine base from liver which protected rats against carbon tetrachloride and chloroform cirrhosis.

5. *The Pharmacy of Antacids.* Alfred Barol, Philadelphia, Pennsylvania.

The author set forth certain cardinal features in the selec-

tion of medicaments for the neutralization of excessive gastric acidity. The amphoteric hydroxide of aluminum was considered best suited for this purpose.

6. *The Detection of Cannabis Sativa*. James C. Munch, Harry W. Mantz and Harry J. Pratt, Temple University.

The authors reviewed the methods employed for the detection of constituents of cannabis sativa and its preparations. The presence of chlorophyll interferes with the characteristic reactions for cannabinol, the generally accepted active principle of cannabis.

7. *Further Studies on the Sugar Alcohols*. Jon C. Krantz, Jr., C. Jelleff Carr and Frances Beck, University of Maryland, School of Medicine.

The authors presented studies on the effect of the anhydrides of many of the sugar alcohols on the dissociation constant of boric acids.

8. *Berries of the Matrimony Vine (Lycium halmifolium Mill.)* Arno Viehoever, Joseph F. Oakley and Joe Coletta, Philadelphia College of Pharmacy and Science.

The authors discussed experiments on the feeding of the berries of the Matrimony Vine to rats. The nutritious value of these berries was comparable to that of tomatoes in the rat's diet.

Program

For the Joint Session of Section N on Medical Sciences with Subsection N₂, on Pharmacy, December 28, 1936.

1. *Locus and Mechanism of Action of Certain Autonomic Drugs*. Theodore Koppanyi, Charles R. Linegar and Robert Herick, Georgetown University.

Among other important observations, it was shown that physostigmine stands out as a drug capable of inhibiting an esterase in the blood responsible for the continuous destruction of acetylcholine.

2. *A Contribution to the Etiology of Gall Stones*. Maurice Feldman, Samuel Morrison, C. Jelleff Carr and John C. Krantz, Jr., University of Maryland, School of Medicine.

The authors presented a contribution to the etiology of gall stones, in which it was shown that the pH of the bile of various species was a salient etiologic factor in the dissolution and formation of gall stones.

3. *The Effect of Posture Upon Alveolar Carbon Dioxide in Man.* R. F. Main, Medical College of Virginia.

The effect of posture on the alveolar carbon dioxide tension in man was discussed by the author. He showed that standing produced a drop in alveolar carbon dioxide and a mild alkalemia, which perhaps is indicative that man has not yet completely adapted himself to his upright posture.

4. *Echinococcus Disease in Canada and the United States.* T. B. Magath, Mayo Clinic, Rochester, Minnesota.

The author presented a study of the incidence of Echinococcus disease in the United States and Canada. The incidence was highest in centers of immigration. Of interest was the fact that although dogs in many foreign countries are infested with the Echinococcus, particularly in Iceland, the dogs in North America are very rarely infested.

5. *Experiments in Human Autonomic Pharmacology.* Abraham Myerson. Division of Psychiatric Research, Boston State Hospital, Dorchester Center, Massachusetts.

The author reviewed the pharmacology of the drugs that affect the autonomic nervous system and experimenting with human subjects. He confirmed many of the well known actions of these drugs observed on animals.

6. *Vitamin C Studies in the Rat. Effect of Selenium Dioxide.* Joseph L. Svirbely, Carnegie Institute of Technology.

The author presented studies on the effect of selenium dioxide on the vitamin C content of the organs of the rat. The selenium compound produced a marked decrease in the liver content of Vitamin C; this action of selenium dioxide is antagonized by glutathione.

7. *Sensitivity to Radiation as a Function of Chromosome Size.* A. Marshak, Palmer Memorial Hospital, Boston, Massachusetts.

The author discussed the sensitivity of chromosome to radiation.

8. *Chronic Arsenical Poisoning from a Well Water and Its Investigation.* J. Wyllie, Queen's University, Kingston, Ontario.

The author presented the results of a detailed study of a toxicological nature of chronic arsenical poisoning from well water. The symptoms, origin, and geologic aspects of the case were presented.

**EXHIBIT OF SECTION N₂, PHARMACY COLOR NAMES
FOR PHARMACEUTICALS**

The exhibits showed the division of the color solid into about 500 named compartments, the application of this system in determining color names for samples, and a number of National Formulary drugs and chemicals together with the present color names and the proposed new names.

JOHN C. KRANTZ, JR.

**Popular Lectures Delivered at the Philadelphia
College of Pharmacy and Science During 1937**

The Philadelphia College of Pharmacy and Science will present for the seventeenth consecutive year, a series of popular lectures on scientific subjects for the benefit of the general public. The series began on January twentieth in College Hall. The titles of the lectures will be of interest to pharmacy colleges planning a similar service. They are:

Out on the Sea in Ships, George Rosengarten.

Bossy, the Contented, Versatile Servant, Freeman P. Stroup.

The Blood Pictures in Anemia, Lewis Geishenfeld.

Tobacco Tales Retold, Ivor Griffith.

Gels and Jellies, Linwood F. Tice.

The Orange and Its Kin, Joseph W. E. Harrisson.

The Ups and Downs of Mercury—The Story of the Thermometer, John E. Kramer.

Flavors of Foods, Cooked and Uncooked, Charles H. LaWall.

Sleep and Sleeplessness, Horatio C. Wood, Jr.

Digestion in Health and Disease, Arno Viehoever.

**Radio Program at the University of Oklahoma
for 1937**

The University of Oklahoma, School of Pharmacy is sponsoring a series of radio talks during the current academic year. The subjects of these lectures will be of general interest to those who are planning similar programs.

1. *An Introduction to the Series. Pharmacy—A Noble Profession. Opportunities in the Profession of Pharmacy.* D. B. R. Johnson.
 2. *Women in Pharmacy—The Home Medicine Chest. The Story of the Soda Fountain.* Ina Griffith.
 3. *The Distribution of Insecticides—The Story of Salt.* Lloyd Harris.
 4. *Drugs in History.* (A series of fine lectures.) Ralph Bienfang.
 5. *Protecting Public Health—Water Purification. Chemistry in Medical Diagnosis.* Leena McArthur.
 6. *Problems in the Management of the Retail Drug Store—Analysis of the Norman, Oklahoma, Trading Area.* Ralph A. Beegle.
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Iowa's Veteran Druggists' Museum

The College of Pharmacy of the University of Iowa has always been interested in preserving anything of historic value. A few years ago it was decided to take definite steps to build up a museum before some valuable things should be destroyed. Iowa is not an old state, yet old enough that many of her pioneer druggists have passed away. No doubt some of the "tools" they used and the drugs they dispensed have found their way to junk heaps. The alumni of the University, through the regular *News Letter* were told about the project and urged to be on the lookout for anything old, in any way connected with the drug business of the State. The response has been good. Many rare articles have been sent in. In 1932, the Veteran Druggists' Association voted to make the College of Pharmacy of the University of Iowa the depository of historic relics and since that time many books, old apparatus, and old remedies have been contributed. Display cases are built along the walls of the corridors where they can be seen not only by students as they pass from class to class, but also by the general public who come in large numbers to general university programs and functions. The Veteran Druggists' Museum is valuable as a teaching aid in tracing the history of the development of the profession.

(Continued from Inside Cover)

LOUISIANA

Loyola University, New Orleans
College of Pharmacy, New Orleans;
John F. McCloskey, Dean (1921).
(John F. McCloskey.)

Xavier University, College of Pharmacy,
New Orleans; Lawrence Ferring, Dean (1933).
(Charles J. Kelly.)

MARYLAND

University of Maryland, School of Pharmacy,
Baltimore; Andrew G. DuMez, Dean (1900).
(Andrew G. DuMez, Glenn L. Jenkins,
Evander F. Kelly.)

MASSACHUSETTS

Massachusetts College of Pharmacy,
Boston; Howard C. Newton, Acting Dean (1900).
(Theodore J. Bradley, Heber W. Youngken,
Howard C. Newton, Leslie M. Ohmart,
Will T. Bradley, Eldin V. Lynn, Joseph G. Goodness,
Ray S. Kelly.)

MICHIGAN

Detroit Institute of Technology, College of Pharmacy and Chemistry,
Detroit; Esten P. Stout, Dean (1923).

Wayne University, College of Pharmacy,
Detroit; Roland T. Lakey, Dean (1925).
(Roland T. Lakey.)

University of Michigan, College of Pharmacy,
Ann Arbor; Howard B. Lewis, Director (1900).
(Howard B. Lewis, Charles H. Stocking,
Justin L. Powers.)

MINNESOTA

University of Minnesota, College of Pharmacy,
Minneapolis; Charles H. Rogers, Dean (1901).
(Charles H. Rogers, Gustav Bachman,
Charles V. Netz.)

MISSISSIPPI

University of Mississippi, School of Pharmacy,
Oxford; Elmer L. Hammond, Dean (1913).
(Elmer L. Hammond.)

MISSOURI

St. Louis College of Pharmacy, St.

Louis; Charles E. Caspari, Dean (1900).

(Charles E. Caspari, George F. Reddish,
F. W. Sultan.)

MONTANA

State University of Montana, School of Pharmacy,
Missoula; Charles E. F. Mollett, Dean (1917).
(Leon W. Richards.)

NEBRASKA

Creighton University, College of Pharmacy,
Omaha; William A. Jarrett, Dean (1916).
(William A. Jarrett, Alfred C. Anderson.)

University of Nebraska, College of Pharmacy,
Lincoln; Rufus A. Lyman, Dean (1913).
(Rufus A. Lyman, Joseph B. Burt,
Lucille M. Mills.)

NEW JERSEY

Rutgers University, The State University of New Jersey,
New Jersey College of Pharmacy,
Newark; Ernest Little, Dean (1923).
(Ernest Little, George C. Schicks.)

NORTH CAROLINA

University of North Carolina, School of Pharmacy,
Chapel Hill; J. G. Beard, Dean (1917).
(J. G. Beard, Henry M. Burlage,
Ira W. Rose.)

NORTH DAKOTA

North Dakota Agricultural College, School of Pharmacy,
Fargo; William F. Sudro, Dean (1922).
(William F. Sudro.)

OHIO

Ohio Northern University, College of Pharmacy,
Ada; Rudolph H. Raabe, Dean (1925).
(Rudolph H. Raabe.)

Ohio State University, College of Pharmacy,
Columbus; Clair A. Dye, Dean (1900).

(Clair A. Dye, Clarence M. Brown,
Robert L. McMurray.)

Western Reserve University, School of Pharmacy,
Cleveland; Edward Spease, Dean (1902).

(Franklin J. Bacon.)

OKLAHOMA

University of Oklahoma, School of Pharmacy, Norman; David B. R. Johnson, Dean (1905).
(David B. R. Johnson, Loyd E. Morris, Ralph D. Blumhagen, Leo L. Griffith.)

OREGON

Oregon State Agricultural College, School of Pharmacy, Corvallis; Joseph Zieffe, Dean (1935).
(Lewis C. Erith.)

North Pacific College of Oregon, School of Pharmacy, Portland; Antone O. Mickelsen, Dean (1914).
(Antone O. Mickelsen.)

PENNSYLVANIA

Pennsylvania University, School of Pharmacy, Pittsburgh; Hugh C. Muldoon, Dean (1927).
(Hugh C. Muldoon.)

Philadelphia College of Pharmacy and Science, Philadelphia; Charles H. LaWall, Dean (1900).

(E. Fullerton Cook, Freeman F. Stroup, Maria S. Dunn, Arno Vischover, Arthur Ozol, John N. McDannell, Linwood F. Tice.)

Temple University, School of Pharmacy, Philadelphia; H. Evert Kendig, Dean (1928).

(H. Evert Kendig, James G. Munch, Robert L. Swain.)

University of Pittsburgh, Pittsburgh College of Pharmacy, Pittsburgh; C. Leonard O'Connell, Dean (1900).

(C. Leonard O'Connell, L. K. Danaher.)

PHILIPPINES

University of the Philippines, College of Pharmacy, Manila; Mariano V. del Rosario, Dean (1917).
(Vidal A. Tan.)

PUERTO RICO

University of Puerto Rico, College of Pharmacy, Rio Piedras; Lucas L. Velez, Dean (1926).

RHODE ISLAND

Rhode Island College of Pharmacy and Allied Sciences, Providence; W. Henry Rivard, Dean (1923).
(W. Henry Rivard.)

SOUTH CAROLINA

University of South Carolina, School of Pharmacy, Columbia; Emery T. Motley, Dean (1923).
(Emery T. Motley.)

SOUTH DAKOTA

South Dakota State College, Division of Pharmacy, Brookings; Earl R. Series, Dean (1908).
(Clark T. Eldsmoe, Lovell D. Miner.)

TENNESSEE

University of Tennessee, School of Pharmacy, Memphis; Robert L. Crowe, Dean (1914).
(A. John Schwarz.)

TEXAS

University of Texas, College of Pharmacy, Austin; William F. Gidley, Dean (1923).
(William F. Gidley, William R. Neville.)

VIRGINIA

Medical College of Virginia, School of Pharmacy, Richmond; Wortley F. Rudd, Dean (1908).
(Wortley F. Rudd, William G. Crockett, Arthur L. I. Winna.)

WASHINGTON

University of Washington, College of Pharmacy, Seattle; Charles W. Johnson, Dean (1905).
(Forest J. Goodrich, L. Walt Rising, Russell A. Cain, James M. Dille, Ray P. Ahlquist.)

State College of Washington, School of Pharmacy, Pullman; P. H. Dirstine, Dean (1912).

WEST VIRGINIA

West Virginia University, College of Pharmacy, Morgantown; J. Lester Hayman, Director (1929).
(J. Lester Hayman, Gordon F. Berg.)

WISCONSIN

University of Wisconsin, College of Pharmacy, Madison; Arthur H. Uhl, Director (1900).
(Arthur H. Uhl, Ralph W. Clark.)